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THE

# BRITISH MEDICAL JOURNAL,

BEING THE

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED FOR THE ASSOCIATION BY

WILLIAM O. MARKHAM, M.D.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; PHYSICIAN TO ST. MARY'S HOSPITAL.

VOLUME II FOR 1864.

JULY TO DECEMBER.

London :

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# BRITISH MEDICAL JOURNAL:

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EDITED BY DR. MARKHAM.

LONDON: SATURDAY, JULY 2, 1864.

## Abstract of Lectures

ON THE

### PROGRESS OF SURGERY DURING THE PRESENT CENTURY.

*Delivered at the Royal College of Surgeons.*

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A. Cantab.]

THE editor, knowing that I had been present at the whole of the course of lectures which Mr. Fergusson recently delivered at the Royal College of Surgeons, was kind enough to request me to give the readers of the BRITISH MEDICAL JOURNAL a short abstract of the chief points of this very remarkable course of lectures. The detailed verbal reports of the lectures, from Mr. Fergusson's MS., may be found elsewhere; and it is to this report that I have had recourse in quoting such passages as seemed necessary. The object of what follows is rather to bring prominently forward the chief points of novelty or interest in these lectures, and to state, as succinctly as I am able, the general impression which they produced upon one who was not the least attentive or the least interested of Mr. Fergusson's auditors. Although I have not had the advantage of being a pupil of Mr. Fergusson's school, I may say that no one has been more interested in "conservative surgery" than I have—and that, as far as my opportunities have extended, I have lost no fair occasion for testing the practical value of the operations which Mr. Fergusson has done so much to introduce into practice. I trust I shall not be considered presumptuous in criticising what fell from one so eminent and so much my senior. A man in Mr. Fergusson's position finds plenty of critics who, without much troubling themselves to think over what he says (and, perhaps, without any practical experience on the subjects of his discourse), will exhaust their ingenuity in running through the usual vocabulary of compliment. My intention is to point out the amount of instruction which these lectures contained for one who went there strictly in search of instruction, and who very gratefully acknowledges the large amount of it which he found.

Mr. Fergusson commenced his first lecture by pointing out the two courses which were open to him; viz., either to take one special subject, and work it up in all its bearings, supplementing what had been said or done by others with the results of what he

had himself thought and done; or, on the other hand, "to select several subjects in which he had himself taken special interest, or had particular opportunities of studying, and lay them before his hearers in such a way as to give the appearance of novelty and attraction to an audience assembled in the heart of London, and in the metropolitan abode of English surgery." Of these two plans, Mr. Fergusson selected the latter. No syllabus of the lectures was circulated, nor was any plan of the subjects announced. They were as follows: Lecture i, A General View of the Progress of Surgery in the last Forty Years, or thereabouts; Lecture ii, On Conservative Surgery; Lecture iii, On Hare-lip and Fissured Palate; Lecture iv, On Lithotomy and Lithotrity; Lecture v, vi, On Excision of the Knee. It is impossible not to regret Mr. Fergusson's choice. The course of lectures which is allotted by the College to their Professor of Anatomy and Surgery is so short that it is impossible in a single year to do full justice even to a single subject. The topic of Mr. Fergusson's first lecture would have been far from being exhausted had it been carried on to the end of his sixth; but no powers of compression, and no command of language, would suffice to treat adequately in six hours of speaking the immense range of subjects which Mr. Fergusson took up. Consequently, he was obliged to restrict himself to offering detached remarks on each of them—a practice which has its advantages, since it affords a ready refuge against any charge of incompleteness; but which can hardly fail to leave the reader more regretful for what is omitted, than grateful for what has been given.

Mr. Fergusson's first lecture was, perhaps, the most complete illustration of this fact. It was, in a great measure, personal, and commenced with an enumeration of the great men, abroad and at home, who held the first rank in the surgical world in 1825, when Mr. Fergusson entered the profession, followed by a brief account of the most prominent of Mr. Fergusson's contemporaries and teachers in Scotland, on which the lecturer lavished all that zeal and enthusiasm, which our northern kinsmen so often display in speaking of each other. On Mr. Liston especially, he dilated with a warmth and eloquence which the subject well deserved; and he mentioned Mr. Syme in a way which certainly left nothing for his warmest friends to desire. But if a biographical history of surgery had been aimed at, the lecturer would have maintained a more just proportion. He would hardly have given half a page to Liston, Syme, and Lizars, while reducing Brodie and Guthrie to mere names, and passing over Lawrence with a hint. However, to a surgeon of Scottish origin, this compliment to his school might well be indulged.

Mr. Fergusson then passed on from men to things, and began to tell his hearers in what respects the surgery of the present day had varied from that of 1825. He commenced by noticing the great impulse to a more accurate study of surgical anatomy, which had been given by the labours of Hunter and his followers; and then proceeded with a passage, so characteristic, and at the same time so suggestive, that it is worth quoting:



"There were manuals of anatomy in those days, written by men who have since held the highest professional positions, which really left little for the practical surgeon to desire; in fact, the subject was in a manner exhausted. Whatever was essayed as novel, seemed in reality but a repetition of something already done and known; and, with an occasional exception, there was little left for the modern anatomist but transcendentalism and minute observation. Investigations on ill-defined and obscurely developed quantities have, I fear, taken largely the place of wholesome surgical anatomy; and whilst I shall not go so far as to say that they are not of great value to the education of the practical surgeon, I may state that I have often felt inclined to protest against a system which seems to draw little or no distinction between this kind of so-called philosophy and that common-place, but common-sense, anatomy which is of essential service to the practical surgeon. With some it almost appears as if the bulk of the two thousandth part of an inch were of equal importance to the surgeon as the outlines of the sterno-mastoid or deltoid muscles; and with many it seems to be that there is really little or no difference of essential value between 'blastema' and bone, 'molecule' and muscle, 'cytoblast' and cellular membrane!—nay, actually that once familiar term is now in some degree tabooed, and a man's acquirements are suspected if he does not use instead the modern one of 'areolar tissue.'

"In surgical pathology, it was known that a person might live with an obliterated aorta, and might survive the loss of an upper or lower extremity. Inflammation with denudation of bone was commonly believed to necessitate amputation; and diseased joints with ulceration of cartilages, particularly if denoted by crepitation, were generally deemed incurable, excepting by removal of the limb. Tumours of enormous size were frequently met with, and the disease then familiarly known as fungus hæmatodes was more common than in the present day; in both instances doubtless from timidity on the part of those who feared to meddle with what the modern surgeon arrests in early progress."

These remarks are worth reading and thinking over. They are expressed with something of that haste and want of precision which the scheme of these lectures necessitates, for Mr. Fergusson of course does not mean to decry microscopical study any more than he means to assert that modern surgery has found a method of arresting fungus hæmatodes; he only intends to give a useful caution in the first passage to his hearers not to neglect what is practical and certain in surgical anatomy for what is at present so uncertain as microscopical pathology; and in the second, to indicate with what happy boldness the great surgical anatomists of modern times, such as Liston, Syme, Dieffenbach, Langenbeck, amongst many others, have dealt with tumours which their predecessors—because they had less of that minute knowledge of the human frame which Mr. Fergusson is here inculcating, and that confidence in the resources of nature, which is founded mainly on the successful issue of modern operations on the arteries—hesitated to touch.

After somewhat more of this preliminary matter, Mr. Fergusson proceeded to illustrate the changes in modern surgical practice by the comparative simplicity of the modern treatment of wounds, by the modern improvements in treating stone in the bladder, distortions of the limbs, strabismus, cicatrices and unnatural openings, by plastic operation, by modern inventions for physical examination, by the progress of ophthalmic surgery, by the practice of excisions, the introduction of anæsthetic agents, the use

of metal sutures, and finally, by the free interchange of ideas by means of the medical press and other organs of mutual information. The mere list of these subjects shows how sketchy the lecturer's manner must necessarily have been, and what large parts of his ostensible subject he was obliged to omit. "Conspicuous by its absence" was the great change which has come over surgery in respect to the theory of inflammation and the practice of antiphlogistics; but much of what was said was very interesting and suggestive. In noticing the treatment of wounds, Mr. Fergusson made the following observations, which we commend to the attention of practical surgeons.

"In speaking of wounds, I should not be doing justice to my own views and experience, nor to the efforts of others, were I to omit reference to the more common use of stitches than was sanctioned some thirty or forty years ago. When early and perfect union is desired in a line of considerable length, they far surpass other methods, and when judiciously applied (possibly in many instances with a due share of additional support) they are of the utmost value. Throughout my experience I cannot say that I have seen the slightest evil arise from them, whilst the best possible good has often been derived. In fact, some of the greatest triumphs of modern surgery are associated with this simple mechanical process; for how else could so much have been done with those vesico-vaginal fistulæ which so baffled our forefathers, and are now so amenable to skilful operative management? How else could the operation for cleft palate have been successfully accomplished? How else could we have dared to lay open the walls of the abdomen to the extent of six, twelve, or fifteen inches? Much has been said in recent times of the superiority of the wire over thread as the material for the stitch; but for my own part I deem the subject of comparatively little importance, whilst I do not hesitate to proclaim my preference of common silk thread for general use."

With respect to the treatment of stone, since it formed the subject of one entire lecture in the after part of the course, we need not notice the few general observations which the lecturer made on it here. In speaking of deformities, and their cure by tenotomy, drawings of a very successful case, treated by Dr. Wihlin of Southampton, were introduced; and, with reference to excisions, the drawings of Dr. Williamson's well known case of excision of the elbow, in which he removed, also, the whole of the ulna (as Mr. Fergusson put it), were exhibited. Surely, in quoting this case in future, it would be more correct to describe the part removed as "a sequestrum extending the whole length of the shaft of the ulna." Such sequestra have been removed a hundred times before without impairing the usefulness of the limb. Dr. Williamson's case shows merely that the removal of such a sequestrum does not preclude the simultaneous removal of the diseased end of the humerus; but it really shows no more. The bearing, however, of this difference in statement on the question of excision can be more conveniently discussed in speaking of the lectures on excision of the knee.

Such were the chief topics of Mr. Fergusson's first lecture—a performance so interesting and so suggestive, that its hearer did not perceive till after some reflection that the lecturer had taken up a theme which he had not time to finish, and had, therefore, been dwelling on detached parts of it, instead of tracing a plan of the whole.

STATISTICS OF THE BLIND. There are, it is calculated, 30,000 blind people, male and female, in Great Britain and Ireland.



# Transactions of Branches.

## SOUTH EASTERN BRANCH.

### PRESIDENT'S ADDRESS.

By EDWARD L. ORMEROD, M.D., Brighton.

[Delivered June 16th, 1864.]

My first duty, gentlemen, is to welcome you to Brighton, and to express a hope that you may all carry away a pleasant recollection of this meeting. I will not dilate upon the things that you may see here, for I presume that by this hour of the day you have seen all that you intended to see, and that the business of our meeting will occupy your remaining leisure. I will only say, that the attendants at the different places indicated in the notice sent round to the members have had directions to be at your service; and I trust that your visits have been agreeable and profitable; and with these remarks I will turn immediately to the business before us.

It is the custom at these gatherings, I see, for the president to select some particular topic of advice, and to treat of some of the great questions of medical ethics or medical reform. And perhaps, when the snow of years has fallen a little more thickly on my head than it has at present, I may on some future occasion adopt a similar course. Such advice, however, I could hardly give you now. I cannot now claim to guide you on these great moral questions; but if all of us, till we can be teachers, will be followers of the simple rule of doing as we would be done by, the task of medical reformers will be greatly facilitated.

There are certain points which have a particular claim on our attention just now, on which I would invite discussion; matters of recent occurrence, or questions demanding a present solution; and to some of these your attention will be called more particularly in the Report.

The first point to which I shall allude is, I am afraid, not a very agreeable one. You will all probably coincide with me in expressing regret at the condition in which our national *Pharmacopæia* has been presented to us, after so long delay. It is much to be regretted that the proofs of this work were not very largely distributed throughout the country, asking for corrections and suggestions before the final *imprimatur* was set upon it. Some such course is indeed being pursued now, though in a less agreeable way. When the book emerges in a new form, improved by the corrections which a somewhat irritated profession has very freely uttered, I trust it will be more worthy to be called the *British Pharmacopæia*. I must, however, express my satisfaction that at least the metrical system has not been added to its other novelties.

One word on the decimal system, with which legislators have threatened us. Nothing, indeed, can be more simple than a thorough going decimal system; but, before we sacrifice all the comfort of the present generation, and render nearly all our books next to useless, we should satisfy ourselves of the accuracy of the basis of the proposed change, and that the decimal system is the best which can be adopted for all time. If I am addressing any one very enthusiastic for this change, might I recommend him to work his books and his family on a decimal system of hours, making ten or twenty hours for the day for the next week or two, before he seriously attempts to inflict such a bother on his fellow countrymen—and women.

The next subject is one, I trust, of unmingled satisfaction; I allude to the conduct of our JOURNAL. I

could not pass it over unnoticed on the present occasion. We may differ with our honest, zealous, and talented editor on many points; but we must all feel that he does his very best, and that he has raised the JOURNAL to a very high position. On one point in which he seems to differ from many of us—on the question, namely, of gratuitous practice—I think that the difference is not so great as it seems to be. We are all of us agreed, doubtless, that the medical officers of charities ought to be paid for their services; and it is equally apparent on the other hand, that without gratuitous services much real charity would fail. To a certain extent we are powerless in the matter; custom has been allowed to grow up, till what should be taken as a favour from us is now claimed almost as a right. Still the remedy is to some extent in our own hands; the custom need not grow—it should be real charity only to which we minister. Indeed, we are not blameless in the matter; the public rates our services as we rate them ourselves; and when we scramble for gratuitous appointments, when we found special dispensaries, the wise world does not consider this as charity, and prudently offers nothing for what we profess ourselves so exceedingly anxious to give away. Surely we are agreed with our editor in the general truth of his remarks; but, while admitting this much, I would not have it understood that I advocate, nor do I believe him to advocate for a moment, a grasping demand for payment for every service that we render to our fellow-creatures. Notwithstanding all that has been said to the contrary, my firm conviction, nay my personal knowledge is, that, in so doing, we should fall very far short of the liberality of the two professions with which we compare ourselves—the church or the law.

At the present time, medical education is attracting much attention. My own views on this point are so very decided, that I could not express them without detracting much from the impartiality which, as your chairman, I ought to exhibit. One point, however, I may just touch on, as concerning us in the country more particularly—the question of apprenticeships. I suppose that we send upon an average from the Sussex County Hospital every year to the London schools three pupils. I do not profess to have any particular power of teaching; I will not claim for our pupils any singular ability; I regard their success in London and afterwards as the result simply of that modified system of apprenticeship which I should like to see generally adopted. A thorough grounding in their profession, a practical familiarity with the details of minor surgery, and a tolerable knowledge of the rudiments of clinical medicine; these are advantages to a student in the first beginning of his London life which can never be over-estimated. He learns these better with a few than among a crowd. I may say, that I feel quite a pride in the results which this system has produced in the pupils we have sent up to London in years past; and I should not be doing justice to the painstaking, intelligent, young men who at this present moment may be seen at work wherever knowledge is to be gained in the Sussex County Hospital, unless I said that I hope as well for them as for those who have preceded them.

Is it too Utopian to imagine that some day or other the whole country may be divided into districts, each under the superintendence of a medical inspector, who shall be both officer of health and medical assessor to the coroners throughout this district? Should such appointments be made, I feel that the machinery will be derived in great measure from the respective branches of our Association.

There are other topics which will doubtless have suggested themselves to you, and on which I shall be pleased to hear your remarks. There is only one



subject more to which I would myself allude, the loss which we have sustained by the death of our late lamented secretary, Mr. Peter Martin. My knowledge of Mr. Martin, compared to many of yours, is so slight, that I should seem to you to do bare justice to his claims on our affectionate and grateful remembrance, should I try to sketch the history of his connection with our Association. I will only say that this affection and gratitude have urged some of our members to perpetuate his memory by some substantial testimonial which shall be essentially our own. I speak now the wishes of his relatives when I say that it is their desire that such memorial should be of the most unostentatious kind. Had he lived, they tell me, he would not have accepted any testimonial by which a man who could ill-afford to contribute should be made poorer, and they have begged me most emphatically to express their wish that no costly tribute, involving such sacrifices, be erected to his memory. There are among us many who would be pained to be deprived of the privilege of doing something at least to Peter Martin's memory. I trust that, to erect a plain mural tablet, with the simplest of all inscriptions, in the church where he worshipped, would satisfy the affectionate wishes of these; as I am assured on the best authority, indeed of his father, which should be paramount on such a point, that it would best accord with the feelings of those dearest to him.

### BENGAL BRANCH.

STATE SANITATION: A FAREWELL ADDRESS AT THE FIRST ANNUAL MEETING OF THE BRANCH.

By NORMAN CHEVERS, M.D., President for 1863.

[Delivered February 2, 1864.]

GENTLEMEN,—We are assembled for the purpose of formally closing the first year's proceedings of the Bengal Branch of the British Medical Association.

The history of this institution still lies within a small compass. It was planned, with much judgment, by Dr. Chuckerbutty; its leading object being to draw together the European and Native members of the medical profession, resident in Bengal, upon terms of perfect equality, for the cultivation of medical science and for the maintenance of reciprocal good feeling and professional honour.

The Association commenced its working operations in July last. These have been, I think judiciously, wholly confined to the monthly reading and discussion of scientific papers. Most of these have been printed and are about to appear in the *Indian Annals of Medical Science*. It was the opinion of some members that the Association ought to maintain an independent existence; the majority have, however, decided against this view; and, by their votes, the Association has now become a branch of the British Medical Association—those members who refrain from joining the parent institution continuing to enjoy, as Fellows, all the local privileges and advantages of the Association.

The working of the Association has been such as to afford me the gratification of declaring my belief that it is now permanently established with every prospect of assured success.

The Association has sustained a serious loss in the premature death of one of its ablest and most active members.—Dr. John Brown, first Assistant-Surgeon to the General Hospital,—a man who, although scarcely past his first youth, had, by constant labour in the field of science, become a medical author of reputation, and a physician whose decided, but ever modestly enunciated, opinions upon the gravest cases his contemporaries, and even his seniors, often sought

and always attended to with respect. As a man of the most unassuming, honest, and truthful character, generously ambitious, ardent in the professional race, but ever just and scrupulously regardful of the claims of others, he has passed from among his brethren universally beloved, honoured, and lamented.

At the last meeting of the Association new office-bearers, including a council of ten persons, were appointed; and, while again expressing to my brethren of the Association the gratitude with which I shall always remember their unexpected, and I fear undeserved kindness in selecting me as the first president of this honourable and dignified institution, I cannot but warmly acknowledge the favour which they have shewn me in accepting my nomination of my successor in the person of Dr. Edward Goodeve, professor of medicine in this college. I have not yet reached that position in my profession which would entitle me to pass a public eulogium upon my honoured colleague. I can only venture to express the gratification which I feel in enjoying the privilege of being associated with such a man, both in my daily official labours and in the ranks of this Association.

It affords me great pleasure to notice that two of their medals have been awarded by the Prize Committee of the International Exhibition to our esteemed treasurer, Baboo Kanny Loll Dey, for his contributions of collections of Indian drugs and other useful products of this country. This success, obtained by one of our members, cannot but give satisfaction to our Association.

It might be expected that I should dilate at considerable length upon the constitution, objects, and prospects of this Association; I, however, discussed these points rather fully in my opening address seven months ago, and I have now arrived at a period of life and a frame of mind in which it appears to me that every hour, not devoted to the task of steadily advancing some useful object, is spent to disadvantage; I shall, therefore, occupy the few minutes which I might fairly claim for the not unregretful duty of relinquishing this chair and of bidding you farewell, as president, in bringing before the distinguished company of guests who grace this meeting with their presence and yourselves a few of the leading points of a question which vitally affects the interests of us all; this is *State Sanitation*.

The first and most natural object of a parent's care is to preserve the lives of his children. The foremost duty in the political economy of princes is to provide that the lives of their people may be long in the land.

The moral code which, in every great system of religion, defines the duties which God-fearing and just men owe to their neighbours and to themselves is, essentially, a scheme of public health. One century of universal morality would empty our prisons, lunatic asylums, and workhouses, and close more than half of our hospitals; a second would well nigh remove our self-imposed curse of "natural" death in youth.

That all-wise Providence who, amid the thunders of Sinai, gave the Jews a system of religion and a code of sanitary moral laws, also then vouchsafed to his chosen people the revelation of a system of public health which has, ever since, remained open for the instruction of all in the Books of Leviticus and Deuteronomy. Consequently, state medicine or sanitation is a system specially revealed to and enjoined upon man by his Creator—a Mosaic institution, whence the Hindoo and the Mahomedan derive all in their religious precepts and ordinances that is valid for the preservation of health and life in communities.

In sending the children of Israel into the Promised Land, the God of Battles strengthened his chosen



army by no miraculous power. He made them healthy by the operation of a sanitary system, observed as a code of religious ordinances; hence they, having no sick or feeble men amongst them, necessarily conquered in a strife where—Omnipotence ruling all—every struggle was decided by the strong arms and the javelin points.\*

I have been at considerable pains, elsewhere, to shew how clearly the design of a sanitary system shines forth in the moral codes of the Hindoos and the Mussulmans. A similar design is distinctly visible in the religious ordinances of the ancient Egyptians. Three maladies especially afflicted this people. These were a disease somewhat allied to syphilis, for the prevention of which the rite of circumcision was, it is believed, established. It is interesting to remark that it has, recently, been noticed that the Jews of England are very little liable to this class of disorders. In the earliest times, as now, ophthalmia was most destructively rife in Egypt. The priests, considering that onions were hurtfully stimulating to the eyes, consecrated this vegetable, and thereby prohibited its use as food. Leprosy and scorbutic affections were among the worst scourges of this people. On this account, the priesthood abstained from all kinds of fish. The people were allowed to eat those kinds which were considered most wholesome, especially the scaly tribes and shell fish. The flesh of the hog, which is everywhere one of Nature's most active scavengers, was held unclean. Wine was totally prohibited, except twice a year, when the common people were indulged in the use of it. The first magistrates, especially the Pharaohs, were not allowed to drink wine. During the hottest season of the year, when disease was most rife, and temperance in all things most needful, the Egyptians observed a Lent of forty days—a truly dietetic institution. They had several smaller Lents of six days.† The Egyptian system of embalming their dead was, in the highest degree, judicious with reference to the well known peculiarities of their soil and climate.

In ancient Greece, the first object of the lawgiver was to enable a people, destitute of the advantages of wealth and numbers, to hold their own against the world in a system of hand-to-hand warfare, the essential requisites for which were valour and bodily

strength and endurance—the quick eye, the fleet foot, the vice-like grasp in the grapple for life or death.

The state medicine of Lycurgus consisted, mainly, in a system of abstinence carried to the utmost lengths of physical self-denial, and a course of military exercises and athletic public games, in which every sport, like the play of tiger-cats and lions' whelps, was a training for mortal battle. Under the Greek system, the development of the brain kept pace with the development of the thews and sinews, until, among the Athenians, it became the rule that he who, in youth, gained many of the Pythian and Olympian wreaths, often, in his green old age, stood foremost among the sages of the Areopagus. Homer had a deep meaning when he described Nestor the sage as a man who had outlived three generations. So Baily tells us that "warriors full of courage, and politicians full of craftiness, may be frequently met with; but of those who have a great and noble character, the result of their sentiment and strength, no one would have become famous on the earth, if his moral education had not been fortified by an excellent physical one." (*Dictionnaire des Sciences Médicales*. Quoted by Dr. Henry Smith in *The People's Guide to Health*.)

The state medicine of the Athenians, however, rose far above that of the Spartans. Xenophon has left us, in the *Cyropædia*, a sentence which may well form the text to our whole system of civil and military hygiene. It is this:—"I believe, Father," said he, "that I have men with me who are very able in the art of physic." "Child," replied the Father, "the men you speak of are like the menders of torn garments; so, when people are sick, physicians cure them; but your care of health is to be of a nobler kind; it is for you to prevent the army from becoming sickly."

The great soldier had mastered this priceless secret. For two hundred and fifteen days he led his ten thousand Greeks over an inhospitable tract of three thousand six hundred miles; in that memorable retreat no man in all the host perished by disease.

Homer had two favourite epithets in expressing the idea of a large and opulent city; one of these was "well-built," the other signifies "having wide streets."

To the Athenian system of state medicine the Romans of the Empire made great and valid additions, especially in the inauguration of the *Ædiles*, dignitaries wearing the toga prætexta, and having the right of images, among whose leading duties were the care of the city, its public buildings, temples, theatres, baths, aqueducts, common sewers, rivers, and public roads; also of private buildings lest they should become ruinous and deform the city, or occasion danger to passengers. The surveyorship of a great public way or river was an office of high dignity. Cæsar is mentioned by Plutarch as surveyor of the Appian Way; and we find Cornutus Tertullus, a man of very exalted character who had held the consular dignity, most warmly congratulated on his acceptance of the surveyorship of the *Æmilian Way* by Pliny the Consul who, himself, held the office of surveyor of the River Tiber and its banks. The *Ædiles* likewise supervised provisions, markets, and taverns; they inspected those things which were exposed for sale in the Forum, and, if they were not good, caused them to be thrown into the Tiber; they broke unjust weights and measures; they fined or banished women of bad character condemned by the senate or people; they exhibited in public solemn games. Cæsar's Cereal *Ædiles* inspected the public stores of corn and other provisions. (Adams's *Roman Antiquities*.) The plans of Roman castrametation are models upon which all modern generals have formed their systems of encampment. Rome, now one of the

\* Ancient records and modern investigation combine in proving that, in the time of its prosperity, the city of Jerusalem possessed admirable systems of water-supply and sewage. This city, standing upon a limestone rock, surrounded on three sides by precipitous ravines, has, in modern times, been extremely ill provided with water. Formerly, however—when it contained a resident population of probably not less than two hundred thousand souls, to whom the nature of the climate and the ceremonials of their religion combined to render a profuse supply of pure water one of the first essentials of existence—the Rock of Zion had, by a most extensive and judicious system of works, been converted into "a fresh spring in a dry and thirsty land where no water is." So extensive were the city reservoirs, and in all probability also the underground sources of water supply that, according to a recent authority—although during all the sieges which it underwent the inhabitants were frequently driven to the last extremity by hunger—we read of but one occasion on which they experienced any inconvenience through a deficiency of water. This was in the siege by Antiochus. It has recently been calculated that—as Titus, in besieging the city, doubtless cut off all visible supplies of water from without the walls—the besieged must have been supplied with receptacles capable of holding, in the aggregate, upwards of a hundred and forty-five millions of gallons of water. Dr. Pierotti has recently discovered that the Temple of Jerusalem was supplied with a great system of aqueducts, reservoirs, and sewers, all excavated in the solid rock, whereby the blood and offal which would have otherwise accumulated within the sacred precinct at times of sacrifice, were diluted with pure water, and freely carried away into the valley of the Kedron, where this sewage-matter, being collected in appropriate receptacles, was disposed of as liquid manure to the market-gardens. The fullest information on these points will be found in Dr. J. Irvine Whitty's recently published and most interesting volume, *Proposed Water-Supply and Sewerage for Jerusalem, with Descriptions of its Present State and Former Resources*.

† On the above points, vide the works of M. Pauw.

most filthy and unhealthy of all Italian cities, had, in the days of her imperial magnificence, a system of sewage second only to that of modern London, and enjoyed the most copious supply of pure water with which the art and labour of man have ever purified and embellished a city.

We gather from one of the Emperor Trajan's letters that condemned criminals were usually employed in attending to the public baths, cleansing the common sewers, and repairing the streets and highways.

There are passages in the correspondence between Pliny and his master Trajan which forcibly shew that, in the first century of the Christian era, the little cities of Bithynia, Pontica, and Pontus were—under the administration of a wise and benevolent proconsul and of an enlightened sovereign—initiating those first advances towards the establishment of proper sanitary arrangements, which are beginning to be promised for Calcutta in the year of grace eighteen hundred and sixty-four. Thus:—

"To the Emperor Trajan. The city of Sinope is ill supplied, Sir, with water, which, however, may be brought hither from about sixteen miles distance in great plenty and perfection. The ground, indeed, near the source of the spring, is, for somewhat more than a mile, of a very suspicious and loose nature; but I have directed an examination to be made (which will be effected at a small expense) whether it is sufficiently firm to support any superstructure. I have taken care to provide a suitable fund for this purpose, if you should approve, Sir, of a work so conducive to the health and pleasure of this colony, greatly distressed by a scarcity of water."

"Trajan to Pliny. I would have you proceed, my dear Pliny, in carefully examining whether the ground you suspect is firm enough to support an aqueduct; for I have no manner of doubt that it is proper the city of Sinope should be supplied with water, provided their finances will bear the expense of a work so conducive to their health and pleasure."

"To the Emperor Trajan. The elegant and beautiful city of Amastris, Sir, has, among other capital buildings, a most noble and extensive piazza. On one entire side of this structure runs what is called, indeed, a river, but, in effect, is no other than a vile common sewer, extremely offensive to the eye, and, at the same time, very unwholesome by its noxious vapours." [Calcutta of the present day has more than a hundred miles of this kind of sewer, except that, with us, these cloacæ never run; "their strength is to stand still"!]

"It will be advantageous, therefore, in point of health as well as ornament, to have it covered; which shall be done, with your permission, as I will take care, on my part, that money be not wanting for executing so noble and necessary a work."

"Trajan to Pliny. It is highly reasonable, my dear Pliny, if the water which runs through the city of Amastris is prejudicial to the health of the inhabitants, that it should be covered. I am well assured you will, with your usual attention, take care that the money necessary for this work shall not be wanting."

Assuredly the mighty Roman people were not ignorant of the advantages of an enlightened, liberal, and far-seeing system of state medicine.

Towards the end of last century a great scholar and philosopher\* held that "the more we look back to antiquity, the more we study the ancients, the more we look to nature, the more healthy and robust is the organisation." Let us trust that, far on in the nineteenth century, we are recovering and enlarging those undying systems of state sanitation which made

the Greeks and Romans physically, intellectually, and nationally the masters of the world.

About twelve hundred years after the Ædile system of the Romans reached its highest perfection—that is, in the year 1189, late in the reign of King Henry the Third—the worthy citizens of London, then, as now, Europe's greatest city, appear to have begun to perceive the necessity of instituting a system of municipal sanitation. It is a curious remark that, both structurally and in a hygienic point of view, London, seven hundred years ago, in many leading points resembled Calcutta to-day. I have elsewhere fully shewn that, then, the prevailing diseases of London were those deadly agues and dysenteries (now, thanks to sanitation, almost extinct throughout England) which at present menace the lives of every person within this room. Bear with me while I quote from an ancient work not very generally known\* a few passages which shew how much London of the Plantagenets resembled our own Calcutta. The greater part of the royal city was unpaved, but any householder might lay down a pavement before his tenement, "provided it were not to the nuisance of the city or of his neighbour." The coroners' rolls shew that mortal accidents were wont to befall youths attempting to steal apples in the orchards of Ivy Lane and Paternoster Row, just as every mango season now sends into our medical college and Chandney hospitals poor little quick-eyed Bengali lads, who have come woefully to grief in their climbings after the forbidden golden fruit. The due construction of gutters and the convenient dispersion of waste water were objects of consideration. The *camera privata* of the citizens were not left unregulated; they were prohibited within the distance of two and a half or three and a half feet from a neighbouring tenement, and the propriety of their construction was liable to the survey of a jury chosen by the authorities. The situation of London, with an easy descent towards the Thames, was favourable to a surface-drainage aided in a great degree by those natural streams which then flowed open to the river, the Wall-brook and the Fleet, the cleansing and maintenance in a proper state of which were, from an early period, objects of solicitude to the magistracy. It may be collected also, from the perusal of ancient evidences, says our authority, that narrow channels ran down the centre of many of those streets which led directly to the river side. Bad as the effect of these uncovered sewers must have been, they were, possibly, better than no drainage whatever. The greatest source of annoyance, however, was the existence of the public shambles almost in the very heart of the city, clustered round the Church of St. Nicholas, the patron of butchers and fishermen. From a remote time, ordinance after ordinance was levelled against the flagrant nuisance. There being no under drainage, the refuse of the slaughter-houses was thrown by the butchers wherever they could find a place; into the streets, or the Fleet, or into the river Thames, where, often left on the banks, the putrefying heaps, we are told, offended the olfactory senses of the Edwards and Henrys as they rowed between Westminster and the Tower, producing impressive monitions to the Mayor to repress the intolerable excesses of the flesh-mongers, but in vain. By a regulation passed in the reign of Richard the Second, the blood and offal of the shambles were to be boated into the mid stream of the Thames at ebb-tide; but this and subsequent enactments were evaded or carelessly enforced.†

\* Chronicle of the Mayors and Sheriffs of London from 1188 to 1274.

† I cited some of these laws in my work on Public Health, published in 1852. The following is an extended list.

Anno 1320 temp. Edward II. A complaint laid before Parliament

\* Samuel Johnson, quoted by Dr. Henry Smith.



We cannot be surprised that, in these days, the growing prosperity of London was frequently interrupted and marred by frightful outbreaks of disease; that its people were scarcely ever free from the true plague; that, in 1252, this disease broke out in the city at Michaelmas and overspread England during the winter; that, in 1299, there was prodigious mortality among Jews (who occupied, as they still do, a close and unwholesome quarter in the very heart of the city); and that, in 1347, an epidemic, finding London thoroughly prepared as a hot-bed for its ravages, thinned out and slew its overcrowded citizens so vigorously that 50,000 bodies were buried in a week.

Prescott shews that an admirable system of city conservancy was maintained in ancient Mexico. A thousand persons were employed, daily, in watering and sweeping the streets; so that, in the language of an old Spaniard, a man might walk through them with as little danger of soiling his feet as his hands.

According to Garcilasso de la Vega, the Yncas of Peru had roads through the mountains, 500 leagues in length, along which houses for the free accommodation of strangers were erected at convenient distances.

Did time permit, much might be adduced regarding the progress of sanitation in the various countries and cities of ancient and mediæval times, the whole of the facts combining to shew that there has never existed an enlightened people among whom either the government, the priesthood, or the physicians did not, to a greater or less extent, inculcate and endeavour to maintain the rudiments of a system of sanitary morality or state medicine.\* Consequently, that sanitation which has been adopted in very recent times is little more than the sanitary wisdom of the ancients arranged, systematised, and developed into the form of a working science.

In tracing out this profitably suggestive history it is, however, most interesting to observe how independent the development of public health has, in a large measure, been of any direct attempts advisedly undertaken by mankind with a view to promote it, and to remark how largely the causes which tend to lengthen the lives of communities have been evolved under the operation of those occult providential laws, which men of sense are now ceasing to designate as chance.

The assertion that Luther's Reformation, the introduction of the use of cotton candle-wicks and roof-tiles, and the spread of the carpet manufacture, were largely instrumental in ridding England of those agues and dysenteries which were its deadliest scourges at the beginning of the sixteenth century, might, standing without explanation, be well regarded as a mad absurdity. It, however, represents the

by the inhabitants of Southfield against the butchers in that neighbourhood, for digging wells or pits, "without the king's licence", to receive the offal of their slaughtered beasts, which malpractice the mayor and corporation of London were directed to restrain.

1361, *temp.* Edward III. Plague attacked London. Its ravages were mainly attributed to the corruption arising from the slaughter of cattle, sheep, etc., within the city. Consequently, the king issued a proclamation forbidding the slaughter of cattle nearer to the city than Stratford and Knightsbridge. This mandate appears to have been practically set aside by the butchers and taverners.

1380, 3rd of Richard II. A motion was made that no butcher should kill any flesh within London; but at Knightsbridge, or some such distant place from the walls of the city.

1488-89, an Act (1 and 5 of Henry VII. c. 3) was passed, enjoining that "no butcher shall kill any flesh within his scalding house, or within the walls of London, in pain to forfeit for every ox so killed, 12*d.*, and for every other beast, 8*d.*, to be divided between the king and the prosecutor."

*Temp.* Queen Elizabeth. In Lansdowne MSS., No. 18-60, p. 37, are proposals to the Lord Treasurer for amending and enforcing the Act of Henry VII. against butchers killing beasts in the city.

\* Dr. Chevers here gives a collection, evidently made with great labour, of sanitary laws, injunctions, and practices, of various nations in ancient and modern times. Want of space compels us to postpone it.

truth. When every man religiously kept Lent, observed fast days, and refrained from flesh-meat on Fridays, every mere and fish-pond became a valuable property, every stew and eel-pit was a little silver mine.\* In these times, too, the floors of all respectable dwellings, as well as those of theatres and other public buildings, were daily strewed with fresh rushes growing in fenny marshy spots. In the absence of cotton, the peeled rush was the only material of which candle-wicks could be made; and there were, not many years ago, districts in England, where rushes, saturated with grease, were the only tapers obtainable by the poorer inhabitants. Reeds for thatching were also a very valuable commodity. Fuller, writing in 1650, tells us that "an acre of reeds on the bankside is as beneficial as one of wheat." But when it became the desire of most Englishmen to dine daily upon beef and mutton and good wheaten bread and pudding, and when excellent substitutes for rushes and reeds came into general use, every available acre of marsh land became converted into an arable field or pasturage for cattle, infinitely to the removal of malarious diseases and equally to the improvement of agriculture and of public health.

Many, if asked—To what circumstance is the practice, now almost universal out of India, of burying the dead attributable?—would, probably, reply, To the advance of civilisation and of public decency. This reform has, however, been considered, with great probability, as the mere result of a physical necessity. M. Pauw, after shewing that the custom of burning the dead obtained generally in Europe about two thousand years ago, argues that it, at length, became necessary to bury them, because arts, population, and the clearing of grounds had thinned the forests to such a degree that towns and entire provinces were menaced with an approaching want of fuel. He adds that, in the second century of our era, the Romans foresaw the necessity of abandoning their ancient practice, of changing their funeral piles into graves, and of committing the remains of their dearest relations, with infinite regret, to worms and putrefaction. The Christian religion, though originating in a country where the dead were awkwardly embalmed, had not the smallest share in producing the change in question.

It cannot be doubted that, in strictly enjoining the incineration of their dead, the ancient Hindoo lawgivers fully believed that the wood supply of Hindustan was inexhaustible. The result is that, in the present day, the extreme heat both in Lower Bengal and Up-Country, is, in a large measure, due to the scarcity of tree-vegetation. In Calcutta, there is no wood for fuel except that brought at considerable trouble and expense from the distant Sunderbuns. The poor cannot burn their dead, and the waters of the Hooghly are, consequently, infected and poisoned.

It is beautiful to observe by what natural provisions the All-wise progressively works out the improvement of man's physical condition. A simple people occupy a damp and malarious territory; they cut down trees to build their huts, they consume the underwood and jungle in cooking their food and in incinerating their dead. The more rapidly malaria sweeps them down, the more effectually are they compelled to cut broad openings in the bush-obstructed glades, giving admission to wholesome air and invigorating sunshine. They long subsist upon the ripe acorns and beech mast which fall plentifully around them. Their first

\* Whitaker notices that, from an inquisition taken in the time of the last Earl Warren, it appears that the meadow ground, which lay in open field, was worth five shillings per acre; the pasture ground was enclosed, and worth only one-tenth of that sum; and the fishery, a small pond of four acres, was worth almost one-third more per acre than the best meadow ground.



tillage is upon spots where the forest ends and the marsh begins. As those to be supported become more and more numerous, the wood-openings widen and the marshes disappear; and the race, although still unhealthy, grow daily more vigorous in the improving land.

Ten centuries pass away. The country is one wide spread of corn and pasture fields. Every city of the living has, beside it, a city for its dead. The great oak forests have disappeared in the roofings of baronial halls, in the wainscoting of citizens' parlours, in the timbers of men of war which the rocks of a hundred iron-bound shores have now crushed into splinters, where the ship-worm and the dry-rot have not crumbled them into dust. Wood has to be largely imported; elm trees are becoming so scarce that undertakers begin to shake their heads and to suspect that their sons will have to burn the dead in furnaces or to bury them in iron coffins. The admiral and the merchant adventurer now sail forth in iron-plated ships. For two hundred years the staple fuel has been dug out of the bowels of the earth. The leading means of navigation, of manufacture, of carriage, and of transit, are now afforded by steam. Forests, we repeat, have become rare in the land—in fact, there is only one, and it is regarded as so great a curiosity that, recently, a literary man and half a dozen artists have combined to make a book upon it. (*The New Forest, its History and Scenery*, by John R. Wise, 1853.) For five hundred years and upwards, there has been no cover for the wolves and bears, the elk, the white uri, and the wild cat and wild hog, which have all died out, much to the relief of agriculturalists and poultry feeders. The deer are fast disappearing; there is only enough marsh-land to afford pasturage for the cattle demanded by the city markets. With these changes, agree—formerly the commonest disease of the country, from which scarcely any escaped—is becoming extremely rare; and dysentery, once the almost universal scourge under which many of the noblest in the land succumbed, is of so unusual occurrence that the best physicians know next to nothing about it. Such are some of the leading changes by which, in the progress of advancing civilisation, Divine Providence has made the United Kingdom the healthiest realm in the world.

The health of communities is maintained by the simultaneous observance of two systems: personal and public hygiene. The former lies within the reach of the majority of individuals; the latter can only be commanded by the State or by powerfully influential municipal and other bodies. By the maintenance of a strict system of personal hygiene, by the observance of morality in its strictest and widest sense, of temperance, of cleanliness—men of originally healthy constitution, living in a wholesome air and provided with adequate food, fuel, and raiment, for the most part enjoy almost unbroken health and attain extreme old age. The preservation of the health of soldiers and sailors and also of the pauper class must always devolve upon governments, who, as we have already seen, have also, in the earlier stages of civilisation, generally become the conservators of the public health of cities. In modern times, where it has appeared to government safe and proper to do so, *self-government* has been conceded to civic and other communities, in the belief that, wherever the spread of enlightenment is sufficiently advanced and general, ratepayers ought to be allowed free action in providing for the maintenance of public health in their own cities. Nothing can be juster, in the abstract, than this view of the matter; but, practically, civic self-government has not always tended to the public good. Men are too generally inclined to argue thus:—"We are told that this our city is filthy and insanitary—

but it always was filthy in our own and in our forefathers' time. We are accustomed to stench; they agree with us; we are healthy, and have grown wealthy in the midst of these so-called insanitary influences. Should we become sick, we will send for the doctor. We do not believe that disease is preventable, because we have never seen disease prevented; we will leave well alone; we have enough call upon our money without being taxed for the maintenance of municipal commissioners and of unpractical sanitary enthusiasts." These short-sighted men cannot perceive the plain fact that a city is merely a large family; and that a family in which the working men, the bread-winners, are always sick, in which the women languish and bring forth puny offspring, and in which widows and orphans accumulate, cannot but shortly come to ruin. This rule applies as literally and practically to a family of two millions, as it does to a family of ten souls. The whole sanitary system is too natural and too easy to command ready belief. It is like the scorned injunction of the Prophet—"Wash in Jordan and be clean."

It is declared in the oldest and wisest Book extant, that "all that a man hath will he give for his life." It was not so in Birmingham ten years ago; it is not so in Calcutta to-day. But we cannot doubt that, eventually, the instinctive wisdom of human nature will regain its ascendancy.

Before such an audience as this, I need scarcely say much in support of those who are earnest in striving for the advancement of sanitary improvement. Still, although the subject is one of some delicacy, I shall not hesitate to make this the occasion of alluding, in a spirit of moderation, to the manner in which many in Calcutta have met my professional brethren and myself in our recent earnest but, for the present, miserably abortive attempts to establish a rational system of sanitation in this pestiferous city. It appears that many regard our efforts merely as base and selfish attempts to place some one or other of our friends in lucrative situations, as arrogant attacks upon the judgment of those who are wiser than we are, and as unprincipled experiments upon the public purse. We, however, hope to live these ungenerous suspicions down, satisfied that we merely did our duty in urging upon citizens, annually thinned out by something nearly approaching to semidecimation, the importance of sanitation, the necessity for the appointment of a duly qualified health officer, and the obligation of treating him with confidence and adequately remunerating him for his scientific labour. I, however, believe that, exemplary as our failure has been, we have succeeded in laying the foundation of a good work, by grafting in the public mind the idea, which will hereafter grow into the belief, that sanitation is as needful for the safety of this impested city, as water is for the preservation of a burning house; and that, unless its inhabitants are willing to forfeit their lives, they must be content to lay down a few of their rupees in the work of sanitary improvement.

In looking over an old number of the *Eclectic Review* for October 1853, I find some very striking comments upon the position of the public health movement in the popular mind of England ten years ago, which are not without application to the manner in which this vital question is, at present, regarded by many in Calcutta. The reviewer says: "Public health reform is led by men whose motives not even malignity can long blacken or ignorance mistake; its true merits cannot well be shrouded up in any political haze from the common sense of the working man; his interests are, directly and without any drawback, contemplated by it, and it interferes with no other more cherished reform; yet, even in this measure, we are painfully reminded of the infatuated opposi-

tion to their own interests displayed by the working classes during the corn-law agitation.

"In some towns in which preliminary inquiries have been held by the inspectors of the Board of Health, the labouring population, the poorer ratepayers, have actually been led by interested persons to oppose the introduction of the Health Act. Where the town was the most putrescent, the clamour has been the greatest. The owners of bad tenemented property, the proprietors of lanes and courts wherein a high rate of mortality always exists, and whence death and contagion are propagated to the wealthier inhabitants, have been the chief agitators, and have led the small ratepayers, by exaggerating the expense of the necessary works, to join them in their opposition. They have thus succeeded, in some instances, in preventing the application of the measure; and, notwithstanding the tremendous exposures at the examinations of inspectors of existing filth, vice, crime, disease, and death, they still remain—as at Whitehaven, Hertford, Birmingham, Cambridge, etc.—in the same sordid and deadly condition as before. Thousands of those who, during the last few years, resisted the application of the Health Act, must have perished of the diseases against which it is a safeguard. Refusing to accept this defensive armour against death, they have been shot down. There is no other cure for the ignorance from which this mistaken opposition arises than *knowledge*; and here the thinking classes have been greatly remiss in their duty to their brethren of toil. We should have taken more vigorous means to spread accurate views on the subject among the masses of the people."

We have abundant proof of the fact that well-directed sanitary measures are capable of largely reducing mortality in cities. In the sixteenth century, the annual death-rate in London was fifty in the thousand; it is now twenty-five in the thousand. As nearly as can be ascertained at present, in the absence of a census and systematic registration of deaths, the death-rate among Mussulmans in Calcutta is forty-two, and among Hindoos thirty-nine in the thousand. There can be no fair reason why these fearful rates should not be speedily reduced at least to the still very excessive standard of Madras, which, last year, was under 33 (32.74). Why should not these terrible rates be still further reduced to seventeen in the thousand, above which rates, the present Registrar-General declares, all deaths are unnatural? Why should they not, as improvement advances, be brought down even to that singularly low rate of less than ten in the thousand (9.76) of which the last decennial census but one proved the existence in that respectable body, the Society of Friends, residing in all parts of England and Wales? Indian native soldiers are nearly as healthy as any troops in the world—why should not the same standard of salubrity be achieved for the denizens of Indian cities?

The European systems of naval and military hygiene have been tardily developed, and may still be regarded as almost in their infancy.

Most of my auditors will feel interested in the fact that the East India Company were among the first who perceived the necessity of sanitating for their mariners and soldiers. I have collected many evidences of this fact. The following have recently appeared in *Sanisburg's Calendar of State Papers, Colonial Series, East Indies, China and Japan, up to 1616*. Under the Court Minutes of the East India Company, December 10th, 1614, Captain Castleton to be entertained. \* \* \* Trial to be made of sundry of his proposals including the making of fresh bread at sea, with the grinding of corn, "an exercise fit to preserve men in health" instead of meal; of distilling fresh water from salt water by having stills fitted to fur-

naces—a plan which was rediscovered by Dr. Lind, 147 years later, 1761—carrying a hogshead of fresh provisions [?] to be used only in case of necessity. Under the same date is noted:—"Offer of Dr. Burgis to present the Company with an antidote against poison, scurvy, and other diseases to which people are subject in these long voyages. Sir Thomas Roe and Captain Keeling to confer with him and report their opinions."

Preservation of spices and fruits for sick men on the voyage, December 14th, 1614. Richard Hide, a skilful druggist, to be entertained. September 23rd, 30th, surgeons' chests with good drugs to be provided. Dr. Burgis, professing great skill in the cure of scurvy, to be admitted. *Dr. Burgis was afterwards admitted a Free Brother.*

On January 25th, 1615, it is noted: "Instructions in writing and boxes of such things as are to be used for prevention of flux, scurvy, and fever, prepared by Dr. Burgis, delivered to each ship. The cost, about £23, to be paid."

In the English Royal Navy there was no regular system for the prevention of that most preventable of all diseases, sea scurvy, until exactly one hundred and eighty years after this, when—at the constantly maintained instigation of Lind and Blane, and countless other medical officers—lime-juice was made an article of regular supply throughout the fleet.

In 1779, the mortality rate among all employed in the British Navy was 125 in the thousand. About twenty years ago, the navy death-rates ranged only from less than eight per thousand (7.7) annually, on the healthy South American station, to fifty-seven per thousand in the African Squadron.

In the Bengal Presidency, between the years 1812 and 1854, the mortality rate of soldiers, *in hospital*, amounted to 69.40 per thousand. This calculation, of course, included a large proportion of the casualties of many severe and trying war years. In the eight years ending 1853-54, during nearly the whole of which war was in active progress, the death-rate of our European soldiers in Bengal, *both in and out of hospital*, was reduced to 63.38 per thousand; shewing, it may be fairly argued, that considerable improvement had taken place in our mode of sanitating for troops in this country both in peace and war.

The spread of military hygiene in India still continuing to advance, we find that, during the three peace years ending 1861, the death-rate, *in and out of hospital*, in our Bengal European force amounted to only 42.70 in the thousand. In 1862 it was at the comparatively very low rate of 28.10.

Even from these few scattered facts, any of my hearers who have not yet directed much attention to the subject may infer that the sanitarians' claim, under Providence, to the power of preventing and controlling disease and death, is no false boast. In truth, as the triumphs of sanitation spread, the Shaksperian axiom,

"We cannot hold mortality's strong hands,"\* is becoming convertible into the question.

"Canst we hold mortality's strong hands?"

Although the task is one of vast difficulty and is fraught with many disappointments, the advancement of state sanitation in India promises to become a noble success. True, the climate of this country is most unfavourable, but my professional brethren should not allow this bugbear to deter them. Providence has permitted man to modify, in a large measure, the influence of those unfavourable climates in which his lot has been cast. The cry of intellectual and wealthy people in India—"This dreadful climate, this deadly atmosphere," is like the cry of a timid

\* *King, John, act iv, scene 2.*



primitive tribe living defenceless amongst tanks and jungles—"these merciless tigers, these murderous alligators." As the proper advice to the one party would be—"Buy rifles and learn to use them," so the wisest council to the other is—"Master the simple laws of sanitation, and then spend a little of your money in having them carried into effect."

I need not close these cursory and scattered remarks upon a vast and noble question, with any exhortation to the learned and honourable body of my professional brethren who surround me. We all mutually understand and faithfully strive to labour in our mission here. This labour involves trial, discouragement, sacrifice—probably early death; but the duty is plain and the reward assured.

I have now, gentlemen, office-bearers and members of the Bengal Branch of the British Medical Association, only to thank you most heartily for the support which you have afforded me while occupied as your president, to bid you cordially farewell, and to resign this chair to my esteemed and learned successor.

## Progress of Medical Science.

### SURGERY.

**OZENA.** M. Trousseau observes that we must not confound *ozæna* depending upon the condition of the nasal fossæ with the fetor of the breath caused by some affection of the mouth or throat. Of all the causes of *ozæna*, the most frequent is syphilis. Syphilitic *ozæna* is also important in this respect, that more than any other form it leads to ulcerations and necrosis. We can do little in the case of *ozæna* which depends upon necrosis of the bones. The odour will continue as long as any portion of the dead bone remains. An ulceration, a necrosis of the walls of the antrum, or a chronic inflammation of the mucous membrane which lines it, will also produce an *ozæna*, for the cure of which we can do little; and in the greatest number of such cases surgery alone can intervene by penetrating the antrum from the upper row of teeth. In all cases where we can attack the cause of the inflammation of the pituitary membrane, and where there are as yet no osseous lesions, the cure is easy; thus, in syphilitic coryza without ulceration, mercurials, or iodide of potassium, will soon remove this condition. But where we have to do with a herpetic *ozæna* we have no longer any specific remedies, and the condition is often incurable. By means of arsenical or sulphurous preparations, or iodine, we may do some little good, but it is to topical remedies we must chiefly trust. It is still more difficult to contend against the strumous diathesis, and though we may produce some modification of the constitution, by placing the patient in favourable hygienic conditions, and administering some of the ordinary remedies, we must reckon almost exclusively upon those agents which address themselves directly to the affected mucous membrane. Powders inhaled in the same way as snuff, the direct application of caustic to ulcerated points, injections of different kinds, are the means which have proved most effectual. Not that a cure is easy, far from it, or that it can be obtained in a short time; but, however imperfect the method, we arrive occasionally at relatively good results, which we are glad to have obtained. The following are the powders which M. Trousseau generally employs:—1. Subnitrate of bismuth; Venetian talc, of each half an ounce. 2. Chlorate of potash, 30 grains; powdered sugar, half an ounce. 3. White precipitate, 5 grains, powdered sugar, half an ounce. 4. Red

precipitate, 5 grains; powdered sugar, half an ounce. An essential precaution is to clear out, in the first instance, the nasal fossæ, by sniffing up tepid or cold water, so as to remove any crusts or mucous secretions. M. Trousseau uses the mercurial powders in the first instance. The patient should inspire vigorously a pinch by each nostril, and this should be repeated twice or thrice a day according to the amount of irritation produced. In children we must have recourse to injections. These are: 1. Phagedænic water (yellow wash, more or less diluted). 2. Chlorate of potash, 60 grains; distilled water, 7 ounces. 3. Nitrate of silver, 1 grain; distilled water 3½ ounces. 4. Sulphate of copper, or sulphate of zinc, 1 grain; distilled water 3½ ounces. Although topical remedies are the most important, we must not neglect general treatment. Cod-liver oil continued for a long time is often useful. Tincture of iodine, given at meal times, in doses of from 5 to 15 drops, seems often to have a good effect. Arsenical preparations persevered in for a length of time seem often to assist the topical medication. In the treatment of syphilitic *ozæna*, mercury and iodide of potassium hold the first rank. This most disagreeable complaint is one of the most difficult to cure, but it is also one of those which may be best palliated.

**TREATMENT OF DISEASES OF THE RECTUM.** Mr. Thomas Annandale gives the following cases, most of which have occurred in Mr. Syme's practice, to illustrate the treatment of some of the affections of the rectum.

**Internal Hemorrhoids.** CASE I. Miss J., aged 60, came from England, to be under Mr. Syme's care on June 1863. The patient had been troubled with internal hemorrhoids for thirty years. During all this time she had been frequently blistered and bled for what was supposed to be heart-disease. For the last twenty-six years the patient had been a confirmed invalid. Miss J. had also during all this time constantly worn an apparatus to keep up the protruded parts, which came down on the slightest exertion. On examination, there was a bright red mass protruding from the anal orifice, consisting of four distinct masses, which altogether formed a tumour of the size of a child's head. The patient was able to return the tumour within the sphincter, by gradually compressing it and pushing it upward. The patient's bowels having been freely opened by castor oil, ligatures of strong silk were applied in the usual manner round the four tumours. After the application of the ligatures, three of the tumours were completely strangulated; but the fourth not being thoroughly destroyed, a second ligature was applied round its base. The parts could not be reduced after the operation, and were, therefore, left protruding. The patient suffered a good deal of pain for the first few hours after the operation, but at the end of this time the pain subsided. A poultice was then applied to the parts, which were quite black and appeared quite dead. By the sixteenth day after the operation all the ligatures had come away. Her health was very much improved; and the sores left by the separation of the ligatures were healing. The patient said she had not enjoyed such good health and comfort for many years. She eventually returned home quite well, and remains so.

CASE II. Mr. M., aged 82, came to Edinburgh, to be under Mr. Syme's care, on July 15th, 1863. The patient had suffered from internal hemorrhoids for twenty years, which lately had become very troublesome. There was a bright red tumour of the size of half a large orange, protruding from the anus. It consisted of two masses of equal size, and could be returned within the sphincter, but very readily came down again. Ligatures were applied; and the tumours



were returned within the sphincter. Three days afterwards the ligatures were beginning to separate, the strangulated masses lying partly within and partly without the sphincter. On the seventh day, the ligatures had all come away, and the wounds were cicatrising. In little more than two months he was quite well.

CASE III. Mr. C., aged 50, came from Ireland to be under Mr. Syme's care. The patient had suffered from internal hæmorrhoids for eight or nine years. They always came down when he was at stool, and occasionally bled very freely. Three years previously, nitric acid was applied five or six times to the internal piles. These applications gave him much pain, and quite failed to relieve the complaint. Four months before Mr. Syme saw him, several severe attacks of bleeding took place from the piles, which left him very weak. There were three internal piles, two of them of the size of a filbert-nut each, the third a little smaller. One of the tumours had a white mark on it, caused by the previous applications of the nitric acid. There were also some loose folds of skin external to the sphincter. The piles were ligatured in the usual manner, and the loose folds of skin snipped off. The patient had retention of urine for the first twenty-four hours after the operation. At the end of a week the ligatures came away, and in another week he was able to go about, cured of his piles.

CASE IV. J. P., aged 40, was admitted into the clinical surgical wards of the Royal Infirmary on January 26th, 1864. The patient had internal and external hæmorrhoids for sixteen years. During all this time he lost more or less blood whenever he went to stool, and latterly he suffered from headaches and palpitations of the heart. In the years 1856 and 1860, he had nitric acid applied to the internal piles when in South America. These applications gave him temporary relief, but did not cure the disease. On admission, the patient was found to have both internal and external piles. The former were ligatured in the usual way, and the latter were cut off. When the ligatures came away the patient was dismissed, cured of his complaint.

CASE V. A. T., aged 55, was admitted into the clinical surgical wards of the Royal Infirmary, September 8th, 1863. The patient had been troubled for a considerable time with internal hæmorrhoids. On examination there were found two large internal hæmorrhoids, each of the size of a pigeon's egg, protruding from the rectum. One of the tumours was in a state of gangrene. Poultices were applied to the swelling for some days. On October 12th, the pile which was affected with gangrene was gradually becoming destroyed; the remaining one was to-day cut off. On the 19th, the patient was convalescent, and was dismissed, cured of his complaint.

*Prolapsus Ani.* Mrs.—, aged 55, came to Edinburgh, to be under Mr. Syme's care. The patient had been troubled with a protrusion of the bowel for three or four years. During the last twelve months the gut had been almost constantly protruded, and had given rise to great inconvenience and much suffering. The protruded portion could be readily returned, but on the slightest exertion it came down again; so that whenever the patient moved from the horizontal position the gut remained down. On examination there was a protrusion of the bowel four inches in length; it resembled in appearance the prolapsus which is not uncommon in children; and was easily returned within the sphincter. When returned, there could be seen round the margin of the anus several folds of loose skin. No other affection could be detected. Mr. Syme cut off the loose folds of skin, and returned the protrusion. The patient was

strictly ordered to keep the horizontal posture. There was no further protrusion; and, on the sixteenth day after the operation, the patient returned home quite cured. Prolapsus ani in the adult, Mr. Annandale shews, is not a common disease. The last case is a well-marked example of this affection. The treatment adopted, apparently so simple, was quite successful. The patient never had the slightest protrusion after the operation. It is difficult to explain why the removal of a little loose skin from the margin of the anus should so thoroughly and immediately cure this formidable condition of the rectum. It would appear that any alteration of the parts in the neighbourhood of the sphincter ani muscle prevents the proper action, or leads to excessive irritability of the muscle, and thus gives rise to many of those unpleasant and painful symptoms which attend certain of the diseases of the rectum; for we find in such cases that by removing the cause of irritation and restoring the muscle to its healthy action, we most speedily and surely cure the affection of the rectum. (*Edinburgh Medical Journal.*)

TENDO ACHILLIS UNITED BY SILVER WIRE. Dr. G. L. Simmons of Sacramento relates a case in which the tendo Achillis of a man was completely severed accidentally about an inch from its attachment. He found the upper edge of the cut tendon retracted an inch and a quarter into its sheath. He flexed the limb, drew down the retracted tendon by strong forceps, and united the cut ends with a large sized silver ligature; the leg was kept flexed for a few days with adhesive straps, after which the usual slipper and dog-collar were used. In a few weeks the patient was able to walk in a high-heeled shoe with but little pain. Scarcely any stiffness resulted from the injury, and at the date of the report he could walk freely with the slightest perceptible halt. The "propriety of using silver wire in uniting tendons," Dr. Simmons says, "can hardly be questioned. In the above case the result was all that could be desired; and, although position alone might possibly have accomplished the same end in the same time, yet it is probable that the perfect approximation of the parts by the ligature assisted in defining the bond of union until it became strong. In this case, after the uniting mass was perfected, I removed the silver wire, as the play of the tendon caused the foreign body to slightly irritate the neighbouring tissues." (*Pacific Med. and Sur. Journal, and Dublin Med. Press.*)

TURPENTINE IN HOSPITAL GANGRENE. Dr. Hachenberg, of the Federal army, writes of the use of turpentine in gangrene, that his experience with the remedy has fulfilled his most sanguine expectations. In conjunction with the sustaining constitutional remedies now in vogue, is applied the turpentine thoroughly every three hours into the wound; and where there are fistulous openings involving the wound, they are at the same time well injected with it, the wound being first cleansed with warm water and any ordinary disinfectant; where the fasciæ are involved, and are in the way of a thorough application of the remedy, they are dissected out. In the application of this remedy, though the wound may be perfectly saturated with it, little or no pain in most cases is caused. The only precaution necessary is, to keep the turpentine confined within the limits of the wound, not permitting it to come in contact with the adjacent skin; otherwise, and particularly when the parts are excluded from the air, it causes pain, and may in time produce cutaneous inflammation, if not vesication. When the turpentine has been regularly used for a few days, the character of the wound becomes changed. The slough falls out, and the dis-

charges become laudable, leaving a clean basis, with an active tendency to granulation. At the same time, the constitutional symptoms become more favourable. Fever has a tendency to subside, the appetite returns, pain disappears, the patient sleeps, and the countenance again appears cheerful.

The therapeutical properties of spirits of turpentine, which make it, perhaps, the most valuable agent in the treatment of hospital gangrene, are the following:—1. Its permeability. 2. It is a ready solvent of the broken-down adipose tissue of the wound. 3. It has local alterative, stimulating, and sedative effects. 4. Its antizymotic properties. 5. It is antiseptic and styptic. 6. It is non-escharotic in its effects. It causes no immediate or chemical eschar, as do bromine, nitric acid, and some other remedies, which are often the means, unhappily, of the retention of vitiated secretion of the wound.

## British Medical Journal.

SATURDAY, JULY 2ND, 1864.

### THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

“Not what we are, but what we ought to be.”  
(*Old Saw.*)

“SELF-ELECTED and irresponsible bodies have always been found the most unsafe depositories of power. If, moreover, the members hold their offices for life, all the elements of misgovernment are combined; and we may safely anticipate that the public good will be sacrificed to private interests.” Such were the words applied to the Council of the Royal College of Surgeons of England, by Mr. William Lawrence, some thirty years ago.\*

How far Mr. Lawrence's accusation was just at that time, we will not stop to ask; but we will venture to state, that the general terms of his proposition may still be applied to the College which was then subjected to his reforming castigations.

We have already shown that the College has to this day virtually been ruled by a self-elected and irresponsible body; that it has been virtually ruled by the Court of Examiners; and that the Court of Examiners is virtually a body self-elective and holding office for life. Thus, the members of the Court are nominally elected for five years only; but, by the fact of an invariable re-election at the end of that term, they virtually hold office for life. The members of the Court, again, are nominally elected by the Council; but, being all of them members of Council, and forming a veritable *imperium in imperio*, they rule the Council; and, consequently, virtually re-elect themselves. If, therefore, Mr. Lawrence's description of self-elected bodies holding office for life be a correct one, and universally applicable, it may be “safely anticipated” (to use his own

words) “that the public good is sacrificed to private interest” in the instance with which we are now concerned.

Mr. Lawrence's words, it is true, were applied to the Council when it was by charter self-elective, and, of course, are now no longer applicable to that body. But, in so far as the Court of Examiners answers the description of a body which is self-elected, and holds office for life, we may logically argue that it must, in Mr. Lawrence's sense (unless he has altered his views on the subject), be in so far a body which “sacrifices public good for private interests.”

And, truth to say, we see not how to read the past history of the Court of Examiners without finding too many grounds for applying to it the condemnation contained in Mr. Lawrence's solemn axiom. The very Charters of the College, under which the Court lives and acts, bear on their pages an unceasing reprobation of the Court. The new Charters were obtained and framed for the purpose of freeing the College from the charges which Mr. Lawrence, in those days, laid at its door; and the new Charters have within them the prescribed elements of a reformed College. But the College has read them by the dead letter, not by their spirit. Thus, the Examiners shall be elected every five years, says the Charter—thereby expressly indicating that the elections should not be for life. The spirit of the words of Sir Benjamin Brodie was undoubtedly present with those who framed the Charter; and those words may well be here recalled:

“With respect to the College of Surgeons,” said Sir B. Brodie in 1834, “I can say first what the Court of Examiners ought not to be. The mode of electing them ought not to be that which it is at present (1834). The Examiners are now appointed according to seniority, or nearly so. The Examiners ought to be those of whom there is reason to believe that they are the best qualified for the office, whether they are the younger members of the body or the older ones.”

Yes! on May 5th, 1834, these words were spoken by Sir Benjamin Brodie, before a Committee of the House of Commons; and in the sense of these words, and to give effect to them, were the new Charters of the College framed. And yet have we to chronicle the fact—may we not call it the discreditable fact?—that now, thirty years after these words were spoken, the very system which was condemned by Sir B. Brodie and Mr. Lawrence, and which was to have found its reform in the new Charters, is still actually and virtually in as vigorous operation as it ever was, even in those other bygone and corrupt days once so mercilessly reprobated by Mr. Lawrence.

Not in one single instance has the Council—that is, the Court of Examiners—elected an Examiner who was not one of themselves, one of the Council; although the Charter expressly says that the election of Examiners shall be quinquennial, and that Examiners may be elected from the body of Fellows at

\* Select Committee on Education.



large.\* Every man who has been elected to the Court has held office (so far) for life! Business, in fact, has, in this particular, been carried on under the reforming Charters precisely as it was carried on under the supposed corrupt charters of 1800 and 1822.

But, surely, under the broad day of the last half of the nineteenth century, this state of things cannot be allowed to rest in peace. No! indeed. The College must "adjust its mantle" for a change. To publicly and clearly proclaim these things, is to condemn them as untenable—is positively to bring about their reform. For some years past, we have, with this intent, earnestly endeavoured to enlighten the profession on all the short-comings of the College; and glad are we to find that the profession has at last begun to open its eyes to the facts and to the truth. Glad, also, are we to find, that our contemporaries of the press are now ready to second the efforts which we initiated in this direction.

But how is a reform to be effected? We confess that we have hitherto placed our hopes on the election of new men. When the Fellows had resolved that Councillors, at all events, should no longer hold office for life—that there should be a transfusion of "new blood"—an election of Councillors on reforming principles—an election of Councillors tacitly or impliedly pledged to carry out the spirit of the Charter—we confess that we were vain enough to hope that in these new men would be found the secret of a grand requisite reform. Under the motion of these new reforming spirits, we thought that no new Charter would be required; that the present Charters would at length be interpreted according to the spirit and intention of their framers; and that advantage would no longer be taken of those permissive words in them which have enabled men in office to evade their spirit and intent, and so to perpetuate and carry out under them the very evils which they were framed to remedy.

But we think so no longer. Human nature, even of the most reforming sort, is still ever human nature; and when the temptations are greater than ordinary mortal flesh can bear, we must not be surprised even if the new and reforming element transfused into the Council should have proved unequal to the occasion. In the Royal College of Surgeons, as at present constituted, "*les choses* (as we last week said) *sont plus fortes que les hommes*". We have already told the tale of how the newly infused blood—the reforming Councillor—gradually falls away from his high and original intent, seduced by the syren voices which sing within that Council Chamber. *Per me si va, per me si va*, he hears the Court of Examiners ever singing in his ears. To the Court of Examiners—the natural goal of a

Councillor's hopes, the desired object which he sees before him when he seeks to become a Councillor—he soon learns that there is no admission for the spirit of reform—the very Court existing on the negation of reform. Soon does the New Blood learn that his best title for admission to the honours and emolumental sweets of an Examiner's office is the negation of those very principles on which he rode so triumphantly into the Council. "Silence is golden" in that chamber.

We have, therefore, neither faith nor hopes that any reform will come through the agency of this infusion of new men. What, indeed, have they yet to show as the results of their efforts in this wise? What have the loudest reformers *out* of office to show as the results of their reforming efforts in office? The old tale of the best radical out of place making the best conservative *in*, finds ample illustration here. Yet will we blame them not, tempted beyond what frail mortal man can bear. We will blame alone the measures, the unjust situation under which reforming souls are so grievously tempted, and are so naturally led to fall away.

Our hopes in reform can, therefore, now only repose in a new Charter—in a Charter whose terms shall no longer be permissive, but which shall enjoin and enforce the changes which it intends.

And what do we ask for? We ask only for that which we know will at once recommend itself to the sense and justice of every member of the profession outside the Council and the Court of Examiners of the Royal College of Surgeons, and to the sense and justice, also, we have reason to know, of some within that very Council. We ask for that which we are satisfied the Council of the College cannot resist—founded, as it is, on the most plain principles of justice and reason.

We ask that the affairs of the College shall be carried on on the following plain and equitable principles:

1. The Council of the College shall be really and in truth the managing body of the College.

2. No Examiner shall be a member of Council, except the President of the Court and *ex officio*.

3. No Examiner shall hold office for more than five years.

4. Country Fellows shall have the power of voting by proxy at the election of Councillors.

Is it not *primâ facie* absurd, and worse than absurd, that the Council which is nominally, and ought actually to be, the governing body of the College, should be virtually ruled by the Court of Examiners, which it elects, and which ought to be wholly under its supervision and control?

Is it right that an Examiner should be so placed—*i. e.*, in the Council—as to be able to assist in electing himself to the lucrative office of Examiner?

Is it not manifest that some limit ought to be put

\* To prevent any misunderstanding, we may say that, of course, we exclude from consideration here the case of Mr. Cesar Hawkins, who is an examiner, though not of the Council. The history of his particular case is, in truth, the very condemnation of the Council.

to the term of an Examiner's office; that an Examiner should hold office only for a limited and fixed period; and that the limits of that period should be distinctly defined by the Charter?

And is it not most just, and to the interests of the College, and of science, and of the public, that the emoluments of such offices should be distributed so as to enlist the services of all the highest disposable surgical and anatomical skill of the Fellows, instead of allowing them to become patriarchal appanages?

And is it not plainly an act of simple justice, as well as an act of the plainest wisdom, to give country Fellows a vote by proxy? Is there any other means to prevent the bribery, canvassing, and improper conduct, which have characterised some at least of these reformed elections?

So urgent, indeed, seems the need of a new Charter, and so unanswerable and cogent the reasons adduced in favour of it, that to us it seems impossible the College can resist the demand.

One only possible excuse we can imagine, and that is, the legal expenses attending the process for obtaining the Charter. But we will not think that a great corporation, with an income of £10,000 a year, will venture to tell the profession, that it is held back from doing a great act of national justice, because the doing of the act would cost it a hundred pounds!

#### THE LANCET v. MR. TURNER.

THE *LANCET* has once again most unfairly and ungenerously attempted to damage Mr. Turner's candidature for the office of Councillor of the College of Surgeons, by suggesting, and in fact broadly stating, that Mr. Turner could not perform his duties, if he were elected. The *LANCET* says that "a large number of Fellows are doubtful whether to vote for Mr. Turner will not be to sacrifice the interests of the general body to a personal desire to do honour to that excellent surgeon. . . . We do not believe that he could do his duty to the Fellows, etc." Now, we beg to assure that "large number of Fellows who are doubtful" that they may at once lay aside their grounds of doubt on the score alleged. Mr. Turner *pledges himself*, if elected, "to discharge all the duties of Councillor most faithfully." The very fact alleged against Mr. Turner speaks volumes in his favour. He withdrew his name from the contest on a former occasion, because he felt that he could not then devote sufficient time to the work. He now, however, goes, as a determined candidate, to the poll, prepared to give his time; and he pledges his word that he will do the duties of his office (if elected) faithfully and fully. One word more on this score. We believe we are stating a well known fact, when we say that there is not a member of Council who is more regular in attendance than the country Fellow, Mr. Paget. We have even heard it said, that

some London members of Council might well take a pattern from his punctuality. Moreover, it is certain, that no one of the new members—those, we mean, who have been elected on reforming principles—has so boldly and so consistently supported those principles in the Council-room as Mr. Paget. We, therefore, again insist that it is most reasonable and just that the country Fellows should be duly represented in the Council; and we can now add, that the conduct of Mr. Paget, as a Councillor, as a representative of the interests of the country Fellows, has been such as, in an especial manner, to recommend the introduction of another country Fellow. Mr. Turner, it should be noted, will, if he enter the Council, enter it as a free and independent Councillor. He will have no thought of an Examinership before him, and will, therefore, never be tempted to sacrifice the interests of the College at the beck of an all powerful Court of Examiners. We will venture to prophesy, arguing from his age and position—nay, we will venture to assert—if Mr. Turner be elected, there will not be in the Council-chamber two more thoroughly independent men than Mr. Paget and Mr. Turner, and that the true interests of the College will be defended and promoted by no warmer advocates. And why do we say this, and why do we so strongly espouse the election of these men? First, because the country Fellows have a right to be duly represented; and secondly, because Mr. Turner being, like Mr. Paget, untrammelled and unfettered, either by hopes or fears *in futuro*, will, if elected, be one of the very few in office who can venture to act with perfect single-mindedness, who can afford to act solely in the interests of the College, utterly forgetful of any future possible beneficial contingencies, without bias, unselfishly. Whether the *LANCET*, in thus unfairly and untruly attempting to damage Mr. Turner's election, is acting solely in the interests of the Royal College of Surgeons—*i.e.*, of the whole body of Fellows and Members—or in the interests of some individual Fellow of the College, our readers must themselves decide.

The suggestion of the *LANCET*, that Mr. Turner would not be able to attend Committees, is simply frivolous and vexatious. It is a fact, of which the *LANCET*, we suppose, is ignorant, that the only Committee which the three junior members of Council are ever summoned to attend, is the Audit Committee (a paid Committee), which generally meets at the end of each quarter, and a day or two before the meeting of Council. Mr. Paget was on this Committee until last July, when the three younger members were elected; and we would suggest to the *LANCET* to inquire of the Secretary of the College whether any member of the Committee of Auditors ever attended more regularly than he?

We must freely state, that the conduct of the *LANCET* in this affair, in our opinion, suggests unmis-



takably that it has been influenced in its attempt to damage Mr. Turner rather by a spirit of local eliquism, by a wish to serve the ends of personal friendship, than by any large and broad principles—such as it so often boasts of in the abstract—of justice to the College at large. Even if Mr. Turner be, as the *Lancet* untruly suggests, an unfit representative of the College interests, why has not the *Lancet* suggested some country Fellow who, in its opinion, is a more fitting one? The reason of its not doing so, is obvious. We can, we confess, come to no other conclusion, than that the *Lancet* considers that country Fellows ought not to be admitted to the Council.

We sincerely trust that the country Fellows, and those of the London Fellows who desire reform in the College, will, by their vote at the forthcoming election, unmistakably show the *Lancet* that they hold a very different opinion.

SINCE the foregoing remarks on Mr. Turner's candidature were in type, we have received a copy of a letter addressed by that gentleman to this day's *Lancet*. It is as follows.

"SIR,—I do not find fault with you for your full and free analysis of the fitness of the different candidates to fill the office of Councillors to the Royal College of Surgeons; and I quite agree with you in opinion, that a membership of the Council is not only a post of honour, but of duty; and it was with this conviction that I consented to become a candidate for one of the vacant Councillorships. Permit me, however, to state that, in your leading article of last week, you omitted a very important part of what I said from the chair, when I had the honour of presiding at the last annual dinner of the Fellows. On that occasion I pledged myself not only to attend the quarterly meetings of the Council—periods reserved, I presume, for the consideration and disposal of great questions—but that I would not fail to attend (unless prevented by urgent professional engagements) all the meetings convened for the discussion of matters of moment connected with the policy of the Council and the interests of the College.

"I am, sir, your obedient servant,

"THOMAS TURNER, F.R.C.S.

"Manchester, June 27th, 1864."

The *Lancet*, in reply, asserts that it has laboured so long and strenuously to obtain for country Fellows a full share of privileges and personal representation in the Council, that it can but wish well to the candidature of any country Fellow; and Mr. Turner personally possesses its confidence and esteem. It lays great stress on the fact that Mr. Turner will have to attend about twelve Council meetings in the year; and thinks this task "peculiarly arduous at his age, and residing at so great a distance as he does." But since Mr. Turner is desirous of the position, and does not shrink from the onerous task, the *Lancet* "freely supports his candidature". But we must again ask: If the *Lancet* were really desirous of having the country Fellows represented in the Coun-

cil, why did it not suggest a proper candidate, in place of merely pointing out the unfitness—in its eyes—of Mr. Turner?

THE mode of election of Councillors is just on a par with all the other proceedings of the College of Surgeons. It is a wretched system. It not only permits of, but it invites, every kind of electioneering tactics, high and low. Nothing need be said more of it than this, to condemn it; viz., that it allows of men being elected by a *minority* of voters present—i. e., when a majority of voters present have voted against them. In fact, many of the Councillors who have been elected of late years have actually been elected contrary to the opinion (as expressed in their votes) of the majority of Fellows voting. If for no other reason, an alteration of the Charter is demanded to alter this mode of election. It is evident to the common sense of all that no man has a right to enter the Council by a *minority*.

THE College of Physicians held a long Comitia on the 25th ult., having much business to transact. They elected their officers for the ensuing year. Large presents of books were announced from the President and Dr. Latham, as well as from others. The library was declared in excellent working order.—Caxton's *Lefèvre's Siege of Troy*, the first book printed in this country, has been embalmed under a glass case. The College will not part with this literary jewel, which was lately accidentally discovered hidden away in some darkened nook of the library. It is an expensive ornament, being worth, we are told, some £700 or £1,000! We must confess that we should like to see the precious relic shining in a wider and more appropriate sphere—in the British Museum, for example—and the British Consols credited with £1,000, in the name of the College, in its place. Calculated from the low standard of commerciality, this volume in the glass case seems to cost the College £30 *per annum*.—The photographic mania has visited the College, like all other persons and bodies. The College now asks all its Fellows to favour it with their photographs; which, as the President remarked, may prove interesting to the present as well as to future generations. Why should not the Members also be invited to send in their photographs? The physiognomy of a Member might afford the Council, when in doubt, an indication to help them in their difficult task of selecting Fellows!—A memorial, signed by twenty-nine Licentiates of the Apothecaries' Society, residing at Brighton, was presented to the College. The prayer of the memorial was, that the College should grant its licence, without examination, to all gentlemen who are members of the Society of Apothecaries on July 1st, 1864, and may apply for it. Such a step, it was suggested, would make the London College what it ought to be—a

*national medical institution.* In exchange for the College diploma, they would surrender their Apothecaries' licence. The memorial was referred to the Council. We fear, however, that there is little chance of the College acceding to this proposal. We apprehend that, if no other obstacle stood in the way, the simple fact that the Apothecaries' Society requires only three years of study at a medical school, whilst the College requires four years of study at a medical school or a recognised hospital, etc., would stand in the way of any such arrangement. It seems clear that, to make any such arrangement feasible, there must be a nearer approach in the quantity of study required by the two Examining Boards than exists at present.

WE are most glad to see that a subscription has been opened for the purpose of presenting a testimonial to Mr. Griffin, for the earnest, persevering, long-continued, and most arduous efforts, which he has made in behalf of the Poor-Law Medical Officers. That he has not obtained all he might, is assuredly no fault of his. That he has done very much in bringing the true facts of the case before the House of Commons, is certain; and that he has therefore paved the way for justice being done at some future day, is also certain. It would be a lasting reflection upon the profession, and especially upon our Poor-Law Medical Officers, if they allowed such determined energy, so exerted, to pass away without a fitting acknowledgment.

WE have heard it stated that Sir G. Grey has appointed a Committee, consisting of Sir James Clark, Dr. Parkes, and Dr. Sutherland, to confer together on the Army Medical Service difficulty. We apprehend there can be little doubt as to the kind of advice so excellent a trio will give to Sir George. If the fact be correct, it looks well for the future, and shows that the Government is beginning to appreciate the difficulty which meets it.

At the present moment, the following extract from Lord Dalhousie's minute of the Report of the Commission on the Sanitary State of the Army (1858) will be read with interest.

"35. But the most galling, the most unmeaning and purposeless regulation, by which a sense of inferiority is imposed upon medical officers, is by the refusal to them of substantive rank.

"The surgeon and assistant-surgeon rank invariably with the captain and lieutenant; but the rank is only nominal whenever medical officers and others are brought together on public duty; the former has no rank at all, and the oldest surgeon on the list must, in such case, range himself below the youngest ensign last posted to a corps.

"36. It is impossible to conceive how such a system as this can have been maintained so long, on the strength of no better argument than that 'it has been,' therefore 'it ought to be.'

"It is impossible to imagine what serious justifica-

tion can be offered for a system which, in respect of external position, postpones service to inexperience, cunning to ignorance, age to youth; a system which gives a subaltern who is hardly free from his drill precedence over his elder, who perhaps has served through every campaign for thirty years; a system which treats a member of a learned profession, a man of ability, skill, and experience, as inferior in position to a cornet of cavalry, just entering on the study of the pay and audit regulations; a system, in fine, which thrusts down grey-headed veterans below beardless boys."

A CORRESPONDENT, who is well posted up in army medical matters, calls attention to remarks in the last volume of the JOURNAL, p. 600. He assures us that the following statement from the *Morning Post* exhibits a truer statement of the actual deficiency in the medical service of the army than the figures in a quotation which was given from a recent parliamentary return.

"The want of medical officers for the army has never been more urgently felt than it is at present. It is announced that in a short time the Warrant will be issued for the Indian medical staff. No assistant-surgeon has been gazetted for the Indian service since the spring of the year 1861, while vacancies have been continually occurring, as of old, from resignations, retirements, and deaths. These vacancies have been temporarily filled up by medical officers from the general army. One of the provisions of the new Indian Staff Warrant is, that vacancies in the Indian staff are to be filled up by volunteers, under certain limitations of age and service, from the assistant-surgeons of the general army; and as these vacancies are now very numerous, and as the provisions of the Indian Warrant will be far more inviting than those of the Warrant of the general army in its present mutilated state, there will evidently be a large exodus of assistants from the medical staff of the general army to the Indian staff. A recent parliamentary return showed the number of vacancies existing in the Army Medical Department; but this return took no note of the vacancies in the Indian Army Medical Department, nor of the exodus looming in the future to meet this deficiency, any more than it did of the number of surgeons and assistant-surgeons of the general army who are actually at the present time employed in India in consequence of the vacancies in the medical staff of that country. The parliamentary return, by its incompleteness, was only calculated to blind the uninitiated to the real dangers of the situation."

OUR readers will see in the JOURNAL an advertisement to the effect that the graduates of the University of Edinburgh have determined to form an Association in London. Some thirty to forty of the leading graduates residing in London and its vicinity have met together, and unanimously agreed that such an Association shall be formed. Its objects are, we conclude, to maintain good fellowship between the graduates, to mark affection for their *Alma Mater*, and to have at all times ready that power which is implied in unity to defend their own interests and the interests of their University. All graduates who may wish to join the Association are requested to forward their names at once to Dr. Murchison. No doubt we shall soon hear of this important movement being inaugurated by a festival.



# Association Intelligence.

## BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

Gentlemen intending to read papers, cases, or any other communications, are requested to furnish, at their earliest convenience, the titles thereof to the General Secretary.

T. WATKIN WILLIAMS, *General Secretary.*

13, Newball Street, Birmingham, May 10th, 1864.

## BRANCH MEETINGS TO BE HELD.

| NAME OF BRANCH.                  | PLACE OF MEETING.                  | DATE.                           |
|----------------------------------|------------------------------------|---------------------------------|
| NORTH WALSLEY.<br>[Annual.]      | Black Lion Hotel,<br>Mold.         | Tuesday, July 5,<br>1.30 P.M.   |
| WEST SOMERSET.<br>[Annual.]      | Clarke's Castle<br>Hotel, Taunton. | Wednesday,<br>July 6, 2.30 P.M. |
| BATH AND BRISTOL.<br>[Annual.]   | Mineral Water Hos-<br>pital, Bath. | Thurs., July 7,<br>4.30 P.M.    |
| METROPOL. COUNTIES.<br>[Annual.] | Crystal Palace,<br>Sydenham.       | Tuesday, July 12,<br>3.30 P.M.  |
| READING.<br>[Annual.]            | George Hotel,<br>Reading.          | Wednesday, July<br>20th, 4 P.M. |

## NORTH WALES BRANCH.

THE Fifteenth Annual Meeting of the North Wales Branch will be held at the Black Lion Hotel, Mold, on Tuesday, July 5th, at 1.30 P.M., under the presidency of W. WILLIAMS, M.D.

Gentlemen having papers or cases to communicate, will please to forward the titles of the same to Mr. Kent Jones, Beaumaris.

Luncheon at 12.30, at the house of Dr. Hughes.

Dinner at the Black Lion Hotel, at 4 P.M.

D. KENT JONES, *Hon. Secretary.*

## SOUTH-EASTERN BRANCH: ANNUAL MEETING.

THE annual meeting of the South-Eastern Branch was held at Brighton, on Thursday, June 16th. Luncheon was first of all partaken of at the Town Hall, through the hospitality of Dr. Ormerod; after which, the members adjourned to the Council Chamber for business. The chair was taken by the retiring President, JOHN ARMSTRONG, M.D.; and there were also present, besides the President-elect, E. L. ORMEROD, M.D., the following gentlemen: Drs. Armstrong (Gravesend); Carpenter (Croydon); Collett (Worthing); Cunningham (Hailsham); Hall (Brighton); Holman (Reigate); R. Martin (London); W. W. Moore (Brighton); Stephens (Brighton); Taaffe (Brighton); Tyacke (Chichester); and Messrs. Aldersey (Brighton); Blaker (Sussex County Hospital); Bottomley (Croydon); Cordy Burrows (Brighton); Furer (Maidstone); R. Gravely (Newick); Hodgson (Brighton); Hollis (Brighton); Holman (East Hoothly); Humphry (Brighton); A. B. Jones (London); W. Martin (Hammersmith); R. Pearce (Brighton); Philpott (Brighton); R. J. Rogers (Brighton); Sankey (Dover); S. K. Scott (Brighton); Sisson (Reigate); Heckstall Smith (Hove); J. P. Smith (Brighton); Steele (Reigate); Tatham (Brighton); Trustram (Tunbridge Wells); Whately

(Brighton); T. Watkin Williams (Birmingham); Winter (Brighton); Wooldridge (Brighton); and Wordsworth (London).

THE PRESIDENT said that, as there was a good deal of business to be done, he hoped it would be done well, and as worthily became the great town in which they were assembled. His year of office was closing, and he felt, in reviewing that year, that there were associations connected with it, some of a pleasing, some of a painful character—a painful feeling arising from the remembrance that during his year of office they had lost the services of their esteemed secretary, a man memorably associated with the South-Eastern Branch of the British Medical Association. The first intimation we received of his death was from a member resident in Brighton, who suggested the propriety of paying such a mark of respect as became the Association. He (the President) issued a circular, and it was a matter of some consolation to know that nearly forty members of the Association left their homes and practices to attend the funeral. He knew and felt, and it was suggested to him also at the time, that something more than that ought to be done—though, as a mark of respect, perhaps it had not been surpassed at any time during the existence of the Association, not even excepting Sir Benjamin Brodie's funeral. He felt that it would be an act unbecoming of him to assume to himself and determine what the character of the memorial to Mr. Peter Martin should be. Various things had been suggested to him in his endeavours to find out the feeling of his brethren throughout the district; but the result was, that he thought the character of the memorial should emanate from their present meeting. There was one circumstance that gave him considerable pleasure. During his presidency, he had been brought into connection with a large number of his professional brethren throughout his district, and he found that, through this Association, a feeling of friendliness and brotherliness had sprung up amongst them, and a desire to support one another; that discourtesy and party feeling were being obliterated; and that the Association was producing some great fruits which should make them rejoice, and hope for still further better things than they had been accustomed to see. The chair was now about to be filled by a gentleman whose social position, moral character, and professional reputation, would shed a lustre on the office. He thanked the members for the kindness they had shown him during his tenure of office, and introduced the new President, Dr. Ormerod. [*Applause.*]

DR. ORMEROD then took the chair amidst renewed applause, and delivered an address, which will be found at page 3.

*Report of Council.* The Honorary Secretary, Dr. C. HOLMAN, read the following report.

"The Council of the South-Eastern Branch are pleased to report that the Branch still maintains its numbers.

"The few withdrawals have been compensated by the accession of new members, and the total number now on the roll is rather more than two hundred; a result especially due to the exertions of the members resident in Kent, where the district meetings have been carried on with great zeal, and with ever increasing professional and social success.

"The general condition of the Association affords great cause for congratulation. The finances are rapidly improving, and when it is understood that some of the greatest difficulties the Association has had to contend with have been want of funds, caused by the remissness of members in sending their subscriptions, it will not be necessary to adduce any

argument on the part of the Council to ensure the discontinuance of such arrears amongst the members of the South Eastern Branch.

"The JOURNAL, under its present management, bids fair to become a true and able exponent of the opinions of the large majority of the profession, and in its onslaughts on all species of charlatany, and in its observations on the conduct of medical witnesses in cases of professional prosecution, has rendered good service to medicine; whilst the papers appearing in its pages have been of augmented value and interest.

"It is, however, still matter for regret that gentlemen belonging to provincial hospitals do not send more frequent contributions to its weekly issue. A very large amount of most useful information is lost, or lies hid in the note-books of practitioners, who, from their status and ability, are well able to give their quota to the ever accumulating mass of well observed facts, from which deductions may be drawn of untold value, to exercise important influence on the future theories and practice of medicine and surgery.

"Whilst congratulating the members on the prosperous condition of the Association, the Council must draw attention to the large number of the professional body who are not included within its sphere.

"Few medical practitioners can be satisfied with the present condition of the profession, in its social or political aspect. The great question of education has been under the discussion of the Medical Council, but with the result only of issuing a code of suggestions, whose chief features had years since been adopted in the reports of the various Branches of the Association.

"The Army Medical Warrant, which was received with such satisfaction in 1858, has proved a failure, mainly because its provisions have not been carried out in their integrity. A parliamentary return, just issued, states that the number of medical officers who have retired from the army, under the provisions of the Royal Warrant of October 1858, include three inspectors-general, four deputy inspectors-general, and four regimental surgeons-major. In addition fourteen regimental assistant-surgeons, and thirteen staff assistant-surgeons, have resigned since January 1st, 1862. Amongst the vacancies now existing in the various grades of the army medical department, there are twenty-six regimental surgeons, and sixty-four assistant-surgeons still required.

"Until the authorities can give that position to their medical officers which is their due, it will be impossible to secure any number of professional men to enter the service, much less to attract to it the best educated and the best qualified members of our body.

"Whilst the necessity for improvement in the preliminary education of gentlemen intending to practise medicine, is most fully recognised, the Council contend that the present army medical officer is fully qualified to be placed on the most perfect terms of equality with all the other officers of the service.

"To secure, however, any efficient medical reform, it is absolutely necessary that some sufficiently powerful organisation should exist capable of representing the voice of the great body of the profession. This is to a considerable extent afforded by the British Medical Association, and its Branches; the Council therefore cannot too earnestly impress upon its members how large a field for extension there is, even in the South Eastern Counties. We have now rather more than two hundred members, and only one regular annual meeting; but if the numerous and influential members of the profession in Surrey, Kent, and Sussex, who are not yet enrolled, could be induced to join the Association and Branch, and if the plan of local meetings were carried

out in the same admirable spirit as is shewn in the district meetings in Kent, we should have an organisation for purposes of utility, social, scientific and political, which could not fail to carry due weight with the public, with government, with the Medical Council, and with the various medical corporate bodies.

"Mr. Villiers, the chairman of the Poor-Law Relief Committee, has stated in the House of Commons, that he believed the report of the committee would be presented ere long, and in time for legislation this session. Amongst the subjects on which it is understood they have come to resolutions, are *medical relief*; power of Poor-Law Board to dismiss officers; and *superannuation of paid officers*. The medical officers of unions will therefore anxiously await the conclusions at which the committee have arrived.

"Before concluding the report, the Council have to record their bitter sorrow at the loss of their able and well-loved secretary, Mr. Peter Martin. A memoir of him appeared in the JOURNAL of November 21st, 1863, written by one who knew and loved him well. In it his character has been so perfectly portrayed, that the Council make no apology for transferring some portions of it in their integrity to the report.

"Following the bright example set before him in the daily life of one who survives in a green old age, at 84, to mourn and feel but too acutely the loss of his son, Peter Martin was not content to be useful to himself alone—his was a nobler nature. In the midst of the anxious and harassing duties of a large practice, he found time to study how best he might improve the condition of his fellow-workers in the medical profession (the proceedings of the Poor-Law Medical Reform Committee testify to his labours in one direction), and, not less anxiously, how to contribute to the intellectual and social well-being of his fellow-townsmen. Following his father (the founder of both Associations), he became secretary to the Surrey Medical Benevolent Society, and secretary and treasurer of the South Eastern Branch of the Provincial Medical and Surgical (now 'British') Association; and to the ability, tact, and judgment with which he introduced and conducted the business of these bodies is doubtless owing, in great measure, their present flourishing and influential position.

"Few men have left behind them so many sorrowing friends. And this is no mere figure of speech. Gifted by nature with an attractive person; with all good qualities, intellectual and social, looking out through his clear blue eyes, and beaming in his expressive face and winning smile, there was that about him which to the merest stranger was irresistibly attractive. But this was not all. By those who had the privilege of knowing him intimately will be long cherished the remembrance of those more solid attributes of that inner life, to which the access was not so easy; and when to these are added his uncompromising honesty, his fearless candour, and his gentle charity, all nurtured and harmonised and hallowed by faith, a more complete and noble character could scarcely be imagined or portrayed."

"Dr. Armstrong, your president, summoned the members of the Branch to pay the last sad tribute of respect to departed merit. A considerable number responded to his call, and followed Peter Martin's remains to their last resting place, whilst many busy, hardly worked practitioners sent letters of affectionate regard, expressive of regret at their inability to attend. A proposition will be brought forward at this meeting for perpetuating in some fitting yet simple manner, the memory of one who laboured with no common zeal, and with rare ability in everything connected with the best interests of the Branch, and the profession to which he belonged."



Mr. SANKEY (Dover) moved a vote of thanks to the President for his able address, coupling with it the thanks of the Branch to Dr. Armstrong for the efficient manner in which he had discharged his duties during his term of office.

Mr. J. CORDY BURROWS seconded the motion, which was carried unanimously.

Mr. SANKEY moved, "That the report be received and adopted." The remarks of their worthy and esteemed President had his entire concurrence. With regard to gratuitous services, alluded to by the President, there were one or two points which ought to be mentioned. It was the privilege of the medical profession to exercise itself gratuitously. No one with a spark of humanity in his bosom would hesitate to give his gratuitous services when needed; but it had now not only become a request, but a demand, on some persons' part; and this must be met. With regard to apprenticeships, he had had a few colts to break in, and for his own part could bear testimony to the advantages to be derived from apprenticeship. In two years, the young men should be qualified to go to London to attend lectures, and instructed in the elements of pharmacy and medicine and botany, and afforded every opportunity of seeing cases. At the time when he had apprentices, he was the sole surgeon of a dispensary, and had ample opportunity of seeing two or three hundred patients in the course of a week; and many of his pupils have said that they esteemed most highly the advantages which they derived in compounding medicines in his surgery. With regard to their late friend Peter Martin, he concurred most heartily in the proposal for a memorial to his memory, whatever that memorial might be. With regard to the Army Medical Department, he had just been in conversation with an army surgeon, who said, "our profession will go to the dogs before long; they treat us in such a way, that we can't stand it, and they are now calling in the aid of civil practitioners."

Mr. C. TRUSTAM (Tunbridge Wells) seconded, and said he was quite sure they would join in the expressions contained in the report. With respect to their Secretary, they might have gone further and fared worse. There was a time when he threatened to withdraw, on account of the labour attaching to the office; but they were all unanimous in their wish for him to remain in office, and he did so. With respect to what had been said about his character, all the members of the Association could endorse them. He was a man whom nobody could hesitate to like, nobody hesitate to admire—a gentleman in his deportment, a man of intellect, high character, and sterling honesty. He was quite sure that less could not be done than to express their regret at his loss by perpetuating his good deeds, not only through their own generation, but to their children. The more modest the tribute, the greater and more lasting the benefit. It was not by costly structures that the feelings of mankind were perpetuated; but it was the solemn terse sentence that expressed the man. He had gone to a better rest, but they would every one of them never forget his kindness or his worth. He trusted their present Secretary would follow in his steps; surpass him, he could not. Their report contained two or three points to which it was very desirable for him to advert. That the district meetings were doing good service, those who were living in the eastern part of Kent could testify. He had had much pleasure at being at some of these meetings, and more friendly and intellectual meetings he had never attended. He lived as it were isolated from his neighbours; but he was quite sure their Society numbered sufficiently strong for them to hold district meetings in other parts. They were working

good effect amongst themselves; and so long as they agreed together, they could make their power felt. That their profession had been neglected, every one knew and every one felt; they were called upon to do acts of charity which no other profession would do. They gave full credit for what other professions did; but he said it advisedly and boldly, that where their charity, using the decimal system, was counted by one, the medical profession's charity should be counted by hundreds. He was glad that the Association was increasing in numbers, but he hoped it would still further increase. He trusted they were coming to a better time when they would be all of one body; and he trusted the day was fast passing when they would need a medical assessor. He hoped the day would come when the country would not need the coroner's court.

The motion was then put, and unanimously carried.

*The late Mr. Peter Martin.* Dr. ARMSTRONG moved—

"That the members of the South-Eastern Branch of the British Medical Association, at their first meeting, beg to express their sincere condolence with Mrs. Martin and her family upon the irreparable loss which they have sustained in the death of Mr. Peter Martin. The Branch holds his memory in affectionate regard, and his services to the Association in grateful and lasting remembrance."

During the time when the question of a memorial was first mooted, he received a considerable number of letters (some of which he had with him), expressive of the strongest condolence, and also of a desire that something of a permanent character should be associated with the name of their esteemed Secretary. Mr. Martin's worthy successor gave great promise, and would, no doubt, prove a most efficient secretary.

Mr. SANKEY seconded the motion, and said that, although there was great disparity in their ages, it did not lessen the affection between them; for Mr. Martin had always been to him as a son. He only regretted that the English language could not sufficiently express the feelings which actuated him at that moment.

The motion was carried.

Mr. J. CORDY BURROWS said that it was a question among many men and many minds how they could best testify in a lasting and memorable manner to their affectionate regard for the late Mr. Martin, and shew their grateful recollection of his services. He had a resolution which he would read, and then he would explain why he thought it was a proper mode of carrying out that which he was quite sure they all desired to do—which was, to testify that Mr. Peter Martin did not live in vain, and that in his death his good deeds did not die with him, and that in perpetuating his memory they wished others to follow his example. [*Applause.*] Having been a member of that Branch almost from its commencement, he had been brought continually into communication with Mr. Martin and his worthy father; and it was mainly owing to the efforts of the latter that this Branch was established. The mantle descended to the son, a worthy successor, a man esteemed in Reigate and its neighbourhood, and held in affectionate regard by every one who knew him. Throughout his career, he was very anxious that the South-Eastern Branch should do something specially to advance the profession of which he was such an honourable member. The motions which he (Mr. Burrows) had to propose, were as follows:—

"That in grateful and lasting remembrance of the services of the late Mr. Peter Martin to this Branch of the Association, a subscription be made by the members to establish one or more prizes to be given

annually or otherwise to the most deserving students at the Medical Benevolent College at Epsom.

"That a committee be formed to carry out the above, consisting of Dr. Ormerod, Dr. Armstrong, Mr. Cordy Burrows, Dr. Collet, Dr. Carpenter, Dr. Hall, Mr. Sisson, Mr. Trustram, Mr. T. Heckstall Smith, Mr. Hodgson, and Mr. Humphry."

Mr. Martin took great interest in the Medical Benevolent College; and he (Mr. Burrows) was told by more than one gentleman whose sons had been educated there, that a prize, such as the one contemplated, would be a great incentive to study, and would be of the greatest advantage to the institution. He was quite sure that, if they could have the opinion of their departed friend, he would have been the first to support such a resolution, if carried out under similar circumstances. Mr. Peter Martin's father had told him that he thought it would be a proper mode to carry out the affection shown towards his son, but he considered that it would tax too heavily the purses of the medical profession. But, if a certain sum was placed in the hands of trustees, to raise an amount of about £7 or £8 a year, it would be sufficient to provide for a prize or prizes; and it appeared to him that whilst they ought to do honour to their departed friend, they ought also to stimulate the desire for knowledge among the young in the profession. After striving for the prizes, the young men would leave the college imbued with a love for his memory, and with the earnest desire to be as good as he was; for, after all, the real intent of the monument was or should be to point out an example to those who follow after. A tablet in a church was a testimony to a man's goodness and greatness; and it was, as it were, a sermon to those who saw it. But he considered mural tablets to be out of place. If his resolution was adopted, the Branch would take the best possible course to perpetuate their love and esteem for their good and kind friend. [*Applause.*]

Mr. SANKEY seconded the motion. He said that the subscriptions need not be confined to the Branch, but it might be thrown open to the whole Association. Let all contribute to the fund, so that instead of having a prize of £8, they might have one of £80.

Mr. TRUSTRAM suggested that, whatever might be done in the way of prize, a very small part of the sum contributed for the object should be expended in the erection of a tablet to be placed in the parish church of Reigate.

Dr. COLLET had been under the impression that Mr. Martin's friends were adverse to a memorial to his memory; but, after the remarks of Mr. Cordy Burrows, he was relieved on that point, and he hoped the meeting would be unanimous in sanctioning such a memorial as might be worthy of the deceased gentleman. With regard to the question that it would press too heavily upon the pockets of some members of the Association, he would only say this, that he hoped those who were able would contribute largely, and that those who could contribute but little, let them contribute that little cheerfully and without hesitation. [*Hear, hear.*]

The PRESIDENT said he would like to know from Dr. Martin what his uncle's wishes were?

Dr. MARTIN said he had been in communication with his uncle, and he happened to know that he had written to Dr. Ormerod exactly to the effect of that gentleman's address.

Dr. CARPENTER supported the proposition. There was nothing in it which could fail to satisfy the feelings of the deceased gentleman's family. It was as free from ostentation as it was possible for anything to be; and, if they could have had Peter Martin's own opinion, he would have said, "Support the Medical Benevolent College." Mr. Martin had his heart

in the work, and did all he could to support it. It would be all very well of them to place a mural tablet in Reigate Church, to do honour to his memory. But the men of Reigate had anticipated their wish in this respect, and had placed a tablet there; but by whom would the inscription on it be read? Not by the medical profession of England, to whom Mr. Martin had set so excellent an example. If a medal were instituted, it would lead to the inquiry, "Who was Mr. Martin? and why was the medal founded?" If the meeting did what Mr. Burrows had proposed, they would have the good wishes of the late Mr. Peter Martin's best friends, and would be doing no violence to the feelings of the members of his family.

Dr. ARMSTRONG said that, while he was in office, there were three propositions placed before him with respect to honouring the memory of Mr. Peter Martin. One was the erection of a tablet; but the general feeling among those by whom it was discussed was against it, as it would be confined to the church of Reigate, where already there was a monument. Another suggestion was, that a fund should be collected, and invested in Government securities; so that every year a prize might be awarded to the most successful essayist among the medical profession of the Branch. There were many supporters of this scheme. Then came the proposition of Mr. Burrows; and, as far as he (Dr. Armstrong) was able to judge, there seemed to be fewer objections to it than to any other plan. It commended itself to them, because it gave a stimulus to young men to act uprightly, earnestly, and perseveringly.

Dr. HALL suggested that a gold medal, of about £10 value, should constitute one of the prizes, if the funds allowed it, to be given to the student of the highest moral conduct, chosen by the students of the Benevolent College themselves.

Mr. HODGSON and Mr. STEELE also supported the proposition, which was put, and carried unanimously.

*Army Medical Service.* The SECRETARY read the following memorial on this subject.

"To the Right Honourable Viscount Palmerston, First Lord of Her Majesty's Treasury,

"The memorial of the members of the South-Eastern Branch of the British Medical Association sheweth,—

"That your memorialists, being medical practitioners in Surrey, Kent, and Sussex, have to request the attention of Government to the present condition of the Army Medical Service—a condition unparalleled in time of peace.

"That, during the Crimean War, the Army Medical Service proper confessedly broke down.

"That the Report of the Select Committee of the House of Commons in 1856 recommended that the pay and position of the Medical Officer should be improved; and that the necessity for employing civil Assistant-Surgeons should, if possible, be avoided.

"That the Warrant of 1858 contained important concessions to the Medical Officers, and ordered that they should have a certain rank relative to other officers; and that this rank should carry with it all precedence and advantages, except the presiding at Courts-martial.

"That these concessions brought such a number of candidates, that the authorities were enabled to raise the standard of examination and qualification.

"That it soon appeared that the provisions of this Warrant, especially as regards relative rank, were systematically disregarded.

"That the Warrants of 1861 and 1862 contained provisions in direct contravention of the Warrant of 1858 and the recommendations of the Select Committee of 1856.



"The result of this has been, that educated members of our body cannot be found to present themselves for commissions; and that the very evil sought to be set aside by the Committee of 1856, of employing civil Assistant-Surgeons is now, even in time of peace, obliged to be had recourse to; whilst the engagement of these gentlemen is attempted on the derogatory terms of *temporary hiring*, with the prospect of discharge without notice.

"The Parliamentary return just issued shows a state of the Service calculated to cause just alarm to those serving in the Army and to the Public; and your Memorialists would request that due inquiry should be made by Government into the evils complained of.

"Your Memorialists feel assured that, as long as the proper position is denied to gentlemen qualified by their preliminary and professional education to be placed on terms of equality with all the other Officers of the Service, so long will those Practitioners be wanting who ought, in justice to the Country and the Army, to have charge of the lives of our Soldiers, and fulfil the responsible duties of Army Medical Officers."

Mr. W. MARTIN, after a brief address, moved—

"That the memorial be presented to Viscount Palmerston, the First Lord of Her Majesty's Treasury, praying the attention of Government to the condition of the Army Medical Service."

Dr. TAAFFE seconded, and Mr. J. C. BURROWS supported the motion. The SECRETARY urged upon the members present to press the subject upon the representatives of either House with whom they might come in contact.

The motion was then carried; and the memorial was ordered to be signed by the President on behalf of the Branch.

*New Members.* The following gentlemen were unanimously elected members of the Branch:—J. Deans, Esq. (Cranbrook); Philip Whitcombe, Esq. (Gravesend); Albert Hind, Esq. (Gravesend); Arthur Kelsey, Esq. (Reigate); John Newman Winter, M.B. (Brighton); J. K. Tuke, Esq. (Brighton); Athol A. Johnson, Esq. (Brighton); David Richards, Esq. (Brighton); W. Kebbell, M.D. (Brighton); F. J. Money, M.D. (Brighton); John Walters, M.B. (Reigate).

*Council of the Branch.* The following gentlemen were elected members of the Council of the Branch:—W. Addison, F.R.C.P., Brighton; W. Aitken, M.D., Southampton; J. Armstrong, M.D., Gravesend; F. J. Brown, M.D., Rochester; J. M. Burton, Esq., Blackheath; C. Chaldecott, Esq., Dorking; J. Dulvey, Esq., Brompton; W. Hoar, Esq., Maidstone; G. Lowdell, Esq., Brighton; E. Ray, M.D., Dulwich.

*Representatives in the General Council.* The following gentlemen were elected representatives of the Branch in the General Council of the Association:—J. Armstrong, M.D.; G. Bottomley, Esq., Croydon; T. Boycott, M.D., Canterbury; J. C. Burrows, Esq., Brighton; A. Carpenter, M.D., Croydon; H. Collet, M.D., Worthing; F. Fry, Esq., Maidstone; W. Sankey, Esq., Dover; T. Heckstall Smith, Esq., St. Mary Cray; C. M. Thompson, Esq., Westerham; and E. Westall, M.D., Caterham.

*Place of Next Meeting.* Dr. HALL (Brighton) proposed that the next meeting of the Branch be held at the Crystal Palace.

Mr. STEELE (Reigate) seconded the motion, which was carried.

*Officers for the Ensuing Year.* The following gentlemen were unanimously elected officers for the year 1865:—*President*: E. Westall, M.D. (Caterham). *Vice-Presidents*: Albert Napper, Esq. (Cranley); and A.

Sisson, Esq., Reigate. *Secretary*: C. Holman, M.D. (Reigate).

*The Martin Fund.* Dr. ORMEROD, the President, was requested to act as Treasurer of the "Martin Fund".

*Balance-Sheet.* The balance-sheet showed a sum of £30:11 in hand in favour of the Branch, which was the subject of much congratulation; and a donation of £10:10 was voted to the Benevolent Fund.

As the hour had now somewhat progressed, two papers on the programme were necessarily left unread; but it was stated that they would be forwarded to the JOURNAL for publication. At the close of the meeting, the sum of £75 was collected towards the "Martin Fund". The company then adjourned to the Old Ship Hotel to dine, and a convivial evening was spent.

### SOUTH MIDLAND BRANCH: ANNUAL MEETING.

THE eighth annual meeting of this Branch was held at Woburn, on Thursday, June 23rd, at 2 p.m.; H. VEASEY, Esq., President, in the Chair. There were also present, Drs. Barker (Bedford); Bryan (Northampton); and Francis (Northampton); and Messrs. Ashdown (Northampton); J. Carter (Bedford); Hemming (Kimbolton); T. Heygate (Hanslope); Hochee (Fenny Stratford); Matthews (Amphill); Moxon (Northampton); C. Terry (Newport Pagnell); H. Terry, jun. (Newport Pagnell); J. F. Williams (Cranfield); J. Williamson (Bedford); and as visitors, Drs. Graily Hewitt and Thudichum (London); and Messrs. R. McCormick (Aylesbury); T. Miller (Woburn); and J. Prichard (Aspley). All these gentlemen were entertained at luncheon at Mr. Veasey's, and then adjourned to the Town Hall at 2 p.m.

On taking the chair, Mr. VEASEY made a short speech; after which, the minutes of the last meeting were confirmed.

*Officers and Council.* The officers of the Branch were elected unanimously as follows; viz.: *President-elect*: G. Ashdown, Esq., Northampton. *Committee of Management*: W. C. Daniell, Esq.; D. J. T. Francis, M.D.; W. H. Gatty, Esq.; E. Lawford, M.D.; J. F. Morgan, Esq.; W. Moxon, Esq.; W. Paley, M.D.; H. Terry, jun., Esq. *Representatives in the General Council*: R. Ceely, Esq.; F. Duke, Esq.; J. G. Leete, Esq.; Jas. Mash, Esq. *Honorary Secretaries and Treasurer*: J. M. Bryan, M.D.; G. P. Goldsmith, Esq.

*Autumnal Meeting.* It was decided that the next autumnal meeting be held at Buckingham, in October.

*New Members.* The following gentlemen were admitted as members of the British Medical Association and South Midland Branch:—Chas. Bennett, Esq. (Braunston); F. Buszard, Esq. (Northampton Infirmary); Jabez Carter, Esq. (Bedford); James Matthews, Esq. (Amphill); Eustace Olive, Esq. (Northampton).

Several interesting papers were brought forward, but most of them were postponed to the next meeting, thereby enabling the gentlemen present to make a pleasant tour of the Duke of Bedford's House and Park, which were kindly thrown open to them specially by the Duke.

Specimens of the *Trichina Spiralis* were exhibited by Drs. Barker and Thudichum.

*Dinner.* About eighteen gentlemen met at the Bedford Arms Hotel, Woburn, and partook of a dinner.

BIRMINGHAM AND MIDLAND COUNTIES  
BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Hen and Chickens Hotel, Birmingham, on Friday, June 17th; HENRY DOUGLAS CARDEN, Esq., of Worcester, President, in the chair. There were also present Sir Charles Hastings, M.D., and thirty-eight members. Dr. Seaton (Sunbury) and Mr. J. Wyman (Alcester) attended as visitors.

The retiring President (Alfred Baker, Esq.), after thanking the members for the kindness and courtesy shown to him during his presidentship, introduced Mr. Carden as his successor.

*Vote of Thanks to the Retiring President.* It was moved by Mr. BARTLEET, seconded by Mr. SOLOMON, and carried unanimously—

"That the best thanks of this meeting be presented to Alfred Baker, Esq., for his courteous conduct as President during the past year."

*Report of Council.* Mr. OLIVER PEMBERTON (HONORARY Secretary) read the following report.

"The Council of the Birmingham Branch of the British Medical Association feel much satisfaction in laying before the members a statement of the transactions of the past year.

"For the first time since the formation of the Branch, monthly meetings have been held, in accordance with the wishes of the members as unanimously expressed at a meeting of the Society held towards the close of the last session. Several highly important papers have been read and discussed at these successive meetings; and various cases of scientific interest have been submitted for consideration. The number of notices of papers on the list, and the good attendance at the discussions, abundantly establishes the success of this movement.

"The papers and cases are comprised in the following list.

"1. A successful case of Ovariectomy; with remarks on the selection of Cases, and on certain Details in the operation. By Mr. F. Jordan.

"2. Some Observations on Trusses; with a Description of a new one recently invented by Mr. T. P. Salt. By Mr. Oliver Pemberton.

"3. Therapeutical Inquiries: III. Oil of Male Fern in Tapeworm. By Dr. Fleming.

"4. The two Circles of the Blood, historically considered. By Mr. Gamgee.

"5. A case of Hemorrhage from Retained Placenta after Abortion, terminating fatally. By Mr. Lowe.

"6. Prolapsus Uteri; its Treatment by Operation and Mechanical Means. By Mr. Redfern Davis.

"7. Successful Case of Ovariectomy; with Observations. By Mr. J. Clay.

"8. On Amputation by a Single Flap. By Mr. Carden.

"9. The Origin of Bright's Disease of the Kidney. By Dr. Russell.

"The last meeting of the session was occupied in discussing the merits of a charge of neglect of professional duty preferred by the coroner for the district of West Bromwich, in the Southern Division of the county of Stafford, against Mr. John Manley, surgeon. Your Council, in expressing their concurrence with the resolutions which were unanimously passed, exonerating Mr. Manley from all discourteous or unprofessional conduct on the occasion in question, cannot but record their regret at the existence at any time of unpleasant feelings between any medical gentleman and an officer holding so important a position as that of a coroner; the most cordial relations between the profession on the one hand, and

the coroner on the other, being at all times essential to the due fulfilment of the duties of so responsible a court.

"The inefficiency in the last legislative Act relating to compulsory vaccination has been recognised for a long time past by the profession; and now that the public take alarm at the extension of the present epidemic of small-pox, it may be fairly expected that the earnest warnings that have been expressed by medical men on the subject will, at length, receive that consideration which their importance demands. In the opinion of your Council, the recognition by Poor-law unions of all medical practitioners, as public vaccinators of persons unable to pay for themselves, would be a pre-eminently salutary step, and would tend more to diminish the number of unvaccinated children than almost any other measure. At the same time that this great change is effected, an adequate remuneration should be made to all members of the profession who may desire to undertake such duties.

"In the Queen's service, the paucity of applications for medical employment, especially in the army, has led the Director-General of that Department to offer temporary appointments to any who may be willing to accept them. But the profession feel deeply on this matter, and can only point out to its members that a continued persistence in refusing to apply under the existence of unfair regulations, will alone accomplish, in the end, the attainment of the great object which all who are acquainted with the medical service have so long desired—a ratio of rewards and a status of relative rank proportioned to the dangers and responsibilities which have to be met by the non-combatant officers. On this subject, however, the Metropolitan Counties Branch have so recently as Monday last held an important meeting, adopting a series of resolutions which, should they meet with your approval, would receive additional effect by being supported by a special vote of the members who may be present at this annual gathering of the Branch.

"The reply of the Council of the Royal College of Surgeons of England to the memorial of the President and Members of the British Medical Association, requesting the Council to take into consideration the propriety of altering its bye-laws, so that non-resident Fellows of the College may be enabled to vote by proxy at the annual election of Members of Council; viz., 'that it is not thought expedient, by applying for a new or supplementary charter, to endeavour to effect the object to which their memorial relates', is, in the opinion of your Council, eminently unsatisfactory, and calls for the exercise of prompt and strenuous action on the part of the country fellows, in order to obtain, with the least possible delay, this most necessary privilege.

"Referring more nearly to the prosperity of the Branch itself, your Council have to record the addition of a very large number of fresh members from various towns in the Central District, far more than compensating the absence of those who, from change of residence or other circumstances, have withdrawn their names, whilst, happily, none have been removed by death."

Dr. WOLLASTON moved, Mr. F. JORDAN seconded, and it was resolved—

"That the report of the Council now read be received, approved, and entered on the minutes."

*Treasurer's Account.* The account for the past year, read by Mr. T. W. WILLIAMS (Treasurer), showed a balance in hand of £36:13:6.

On the motion of Mr. COLEMAN, seconded by Dr. RUSSELL, it was resolved—

"That the financial statement of the Treasurer



now read be received, approved, and entered on the minutes."

*Election of Officers and Council.* Mr. CLAYTON moved, Mr. DOWNES seconded, and it was resolved—"That Dr. James Russell of Birmingham be the President-elect for the ensuing year."

The voting-lists having been handed in to the President, and examined, the following gentlemen were elected members of Council for the ensuing year: *Country Members*—E. H. Coleman, Esq. (Wolverhampton); D. Everett, Esq. (Worcester); G. Fayrer, M.D. (Henley); J. S. Gaunt, Esq. (Alvechurch); S. J. Jeaffreson, F.R.C.P. (Leamington); G. Lowe, Esq. (Burton-on-Trent); S. Roden, M.D. (Droitwich); H. E. F. Shaw, Esq. (Sutton Coldfield). *Town Members*—A. Baker, Esq.; M. H. Clayton, Esq.; J. Clay, Esq.; J. S. Gamgee, Esq.; F. Jordan, Esq.; J. B. Melson, M.D.; J. V. Solomon, Esq.; W. F. Wade, M.D.

The following gentlemen were unanimously elected Representatives of the Branch in the General Council of the Association: Alfred Baker, Esq.; E. Bartleet, Esq.; H. D. Carden, Esq.; M. H. Clayton, Esq.; G. Fayrer, M.D.; J. S. Gaunt, Esq.; J. B. Melson, M.D.; W. F. Wade, M.D.; O. Pemberton, Esq. (*ex officio*).

*New Members.* The following gentlemen, members of the Association, were elected members of the Branch: 1, E. T. Griffiths, Esq. (Birmingham); 2, J. Butler, Esq. (Great Bridge); 3, Joseph Smith, Esq. (Lozells); 4, J. H. Thornhill, Esq. (Willenhall); 5, G. Wyman, Esq. (Alcester); 6, Alex. M. Inglis, M.D. (Worcester).

*President's Address.* Mr. CARDEN delivered an address, embracing a consideration of various points of interest in connection with surgery, and especially with the operation of ovariectomy.

At its close, it was moved by Sir CHAS. HASTINGS, seconded by Dr. RUSSELL, and carried by acclamation—

"That the best thanks of this meeting be given to Henry Douglas Carden, Esq., for his admirable address, and for his considerate attention to the business of the day."

*Dinner.* The members afterwards dined together at the hotel, under the presidency of Mr. Carden; Dr. James Russell occupying the vice-chair. The usual loyal and professional toasts were given and responded to.

## Correspondence.

### TYPES OF FEVER AND BLOOD-LETTING.

LETTER FROM G. BOTTOMLEY, ESQ.

SIR,—In the BRITISH MEDICAL JOURNAL of the 4th of June is a letter from Mr. Allison, written in a scientific and gentlemanly style, without a single word that could possibly be construed to cast unprofessional reflection upon any member of the medical profession. From the early date of his career down to the present time, I presume there can be but few, like myself, who are able to compare notes with him; for I see Mr. Allison's diploma is dated 1817, my own 1811; so that both Mr. Allison and myself have had a long period of active practice; and I hope those who were in practice at that time, and are living, and willing to support Mr. Allison's statements, will do so at once.

I quite agree with every statement made by Mr. Allison, who, I have no doubt, carefully diagnosed every case that came under his treatment; bled when

he found bleeding necessary, and to the extent the case demanded, and not, as has been stated, according to fashion or custom, but treated every case upon scientific grounds. I could give very many similar cases to those related by Mr. Allison, but they would be merely repetitions. From about the year 1822 to the year 1832, diseases of all kinds assumed the sthenic type; and during that period it was my practice to let the blood flow from the arm into various cups or basins, with a view of ascertaining its inflammatory condition, both from the thickness of its buff coat and its cupping; and as soon as its buff coat and cupping disappeared, further bleeding was discontinued; and if the inflammatory symptoms and pain had not completely subsided, then leeches were applied; and, after that, blisters, etc.; and I am quite satisfied that, if that mode of treatment had not been steadily carried out, many more deaths would have occurred. That treatment, and that treatment alone, saved many from a premature grave.

I above stated the year 1832 as the period when the altered character of disease took place from the sthenic to the asthenic form. The year 1832 was the year of Asiatic cholera; and at the same time a low type of influenza prevailed. From that time to the present, very few acute inflammatory affections have prevailed; consequently, bleeding from the system has been almost abandoned. Its discontinuance has not arisen from fashion, or that the public opinion has been opposed to bleeding, which deterred medical practitioners from doing their duty. Such arguments only give encouragement to such men as the author of the *Fallacies of the Faculty* and homeopaths, who say that they, by their writings and doings, brought about the change in the treatment of disease, and were the cause of putting a stop to bleeding.

The bulk of the medical practitioners of the present day came into practice since the year 1832, now thirty-two years since; consequently, they could not have witnessed the sthenic character of disease that existed at that time, and are now led into the error that no such form of disease ever existed.

Facts, according to the old saying, are stubborn things; and seeing is believing; and, as Mr. Allison justly observes, "various phases of fever and inflammations have taken place from the year 1814 to the present day."

I recollect well the time when George the Fourth (who, I believe, was then Regent) had an inflammatory attack when at Brighton. He was ordered to be bled by his physicians, who believed he had been bled quite enough. But His Majesty thought otherwise; and he sent for the assistant-surgeon of an Irish militia regiment that happened to be quartered at Brighton at the time, who took more blood from His Majesty. His Majesty afterwards made a good recovery. I need not say (for, no doubt, it is still in the recollection of many) that the militia assistant-surgeon became a leading physician. And, as Mr. Allison further states, "however that might be, George the Fourth's illness required a very different mode of treatment from that which destroyed the life of the Prince Consort."

I sincerely hope a different feeling will prevail in the treatment of disease, and that every medical practitioner will treat disease as he finds it, and not empirically; that he will bleed when required, and act diametrically opposite when necessary; not being led away, as it has been said, either by fashion or public opinion. Changes in the form of diseases have been going on, and no doubt will go on, in this country. The change from the asthenic to the sthenic form may take place again; and, instead of the non-bleeding and stimulating mode, the opposite may be

required, and it is impossible to say how soon; and, as Mr. Allison justly says at the end of his letter, "What would be more scientific or better practice, during all ages, than to adapt treatment to the type of a fever or the violence and degree of inflammatory action?"

I have at all times treated disease as it has presented itself; bled either generally or locally, as the case may be; or abstained altogether from bleeding—unbiased, unprejudiced, either by public opinion or the feelings expressed by some members of the medical profession. I am, etc.,

GEORGE BOTTOMLEY.

Croydon, June 18th, 1864.

#### GRATUITOUS MEDICAL SERVICES.

LETTER FROM WILLIAM OGLE, M.A., M.D.CANTAB.

SIR,—The invitation from Dr. Gibbon (June 11th, 1864), that Dr. Ogle will favour the Association with an exposition of what his views *really* are on gratuitous medical services, unfortunately escaped my observation till this afternoon. The Association is already in possession of a full statement in a letter entitled "Provident Medical Association the Remedy for Hospital Abuses," May 31st, 1862. I adhere in the main to the opinions that are expressed in that letter. It was written after a great deal of thought, and is at least an attempt to go to the root of the matter. The good of the patient is made the prime consideration. The payment of the medical man is not overlooked, but is wholly subordinate. A professional advocate cannot invert this order, still less can he put the question of payment alone before the public without exposing himself to the charge of being "narrow and self-interested." I regret very much that Dr. Gibbon's resolutions did not embody the sentiment, which in his letter he so well expresses, as to the inefficiency of the present system.

I endorse and carry out into practice the recommendations of a country surgeon near Bath. I never give "advice gratis" at home. I am, etc.,

WILLIAM OGLE.

Derby, June 21st, 1864.

#### IMPETIGO CONTAGIOSA OR PORRIGO.

LETTER FROM THOMAS HILLIER, M.D.

SIR,—As Dr. Tilbury Fox has mentioned my name in his paper on impetigo contagiosa or porrigio, I shall be glad if you will allow me to make one or two remarks on the disease in question.

Dr. Fox finds fault with me for stating that he had mixed up several diseases under the head porrigio. Dr. Fox's arguments to prove a connection between vaccination and impetigo contagiosa proceed on the assumption that the disease of which he is treating is a disease of recent date, introduced since the prevalence of vaccination. It is quite certain, however, that it was a common disease in Bateman's time, when the practice of vaccination was far from general.

Dr. Fox, in referring to his paper read before the Harveian Society, says: "It is evident that, not only was my differential diagnosis and description of the disease very full, but that the confusion, if any, existed in Dr. Hillier's mind." I must confess that, after hearing the paper read rapidly on that evening, there was a certain amount of confusion left in my mind, and I may go further to say, that my confusion has not been much diminished by a careful perusal of the paper which has been published in recent numbers of your JOURNAL. Dr. Fox's one statement that impetigo contagiosa is "chiefly a mixed disease possessing now the vaccinal, now the impetiginous phase in

excess, at other times both in a tolerably equal degree," is to my mind rather confusing.

Dr. Jenner entertains the opinion that impetigo is a contagious disease; and there is, in my opinion, no doubt that cases of impetigo are frequently transmitted by direct contact from one child to another, or from one part of the same child to another part previously healthy.

Of late years it has become the tendency to believe that no skin disease is contagious except by the medium of an animal or vegetable parasite; and this has been laid down as a dogma in a recent number of the *British and Foreign Medical and Chirurgical Review*. This is, I believe, not true. I see no difficulty in supposing that the contagious character of impetigo is analogous to the contagiousness of some forms of ophthalmia; and it is quite unnecessary to resort to the theory of a connection between impetigo and vaccination, or to suppose that the contagion is dependent on a parasite as was recently suggested by Dr. Dunn.

I am, etc.,

THOMAS HILLIER.

Upper Gower Street.

#### BLOOD-LETTING.

LETTER FROM W. WEAVER JONES, ESQ.

SIR,—Having read the excellent papers which have lately appeared in the JOURNAL respecting "venesection" and the "change of type," I am induced to mention a few cases that have occurred in my own practice. In the year 1816, I assisted a general practitioner, who always told me that bleeding and tartarised antimony were the "sheet anchor" in pneumonia.

CASE I. A gentleman's groom, 25 years of age, was bled on three successive days to the extent of sixteen or twenty ounces each time; leeches were applied; and salines with tartar emetic given. On the fifth day, I saw the patient at 7 o'clock A.M.; he was breathing with great difficulty; pulse 130; cough incessant; sputa rusty. I took two ounces of blood, which relieved the respiration considerably. At 1 o'clock P.M., the difficulty of respiration had increased. I repeated the venesection to ten ounces. At 8 P.M., I again visited him; the previous venesection had relieved him, but he was becoming worse every hour, and the case appeared hopeless. I took a third abstraction of blood, which again relieved the symptoms. Mr. C., the gentleman I was with, had left home for the day, and the case was in my hands. Upon his return in the morning, he called to see the patient; and, the unfavourable symptoms having returned, he repeated the bleeding. We gave neither wine nor spirits, and the man got well.

Since my residence in Cleobury Mortimer (upwards of forty-three years), I have successfully treated numerous cases of pneumonia, bronchitis, pulmonary apoplexy, rheumatic fever, enteritis, congestion and inflammation of the liver, and puerperal peritonitis, by free and repeated venesection, mercurials, etc., without stimulants.

CASE II. In 1837, on my return home through a village, a cottager's wife requested me to see her little girl, three years old. She appeared to be dying from congestion of the lungs. I took ten drachms of blood from the arm, and gave several doses of calomel and ipecacuanha. She recovered.

CASE III. Mr. W., 25 years of age, robust and very intemperate, had congestion of the brain. July 1862. I bled him five times within seventy-two hours after the accident (the amount of blood taken was sixty ounces), and administered calomel, with salines, etc. On the fifth day, Mr. Carden of Worcester saw him; the mercury had affected the gums. He was delirious; the circulation was rapid; he had subsultus



tendinum, and he passed his evacuations involuntarily. Mr. Carden prescribed digitalis with ammonia and salines with great benefit. The patient recovered in due time. He had sustained a fractured leg in addition to the concussion.

CASE IV. January 1864. Miss E., aged 57, had bronchitis, with congestion of the lungs; the pulse 20, soft; respiration hurried; expectoration difficult with wheezing; no pain; countenance congested. Leeches, blisters, calomel, and expectorants were the remedies used. On the fourth day the respiration was so embarrassed, that I felt assured she could not live unless the lungs were relieved. I took twelve ounces of blood from the arm, which gave much relief. The following day, Sir Charles Hastings came to see her. The gums were tender, and he urged a persistence in the expectorants, with the aid of blisters, and the free administration of wine. She was in a precarious state for several days; the pulse continued rapid, and the expectoration difficult. Sir Charles Hastings suggested digitalis; this had a very salutary effect, and she recovered.

During the last twenty years, I have not so frequently met with cases requiring depletion to the same extent as in former years; from which I infer a change of type. I am, etc.,

WILLIAM WEAVER JONES.

Clebury Mortimer, Salop, June 13th, 1864.

#### GRIFFIN TESTIMONIAL FUND.

LETTER FROM ROBERT FOWLER, M.D.

SIR,—At a meeting of the Committee of the Metropolitan Poor-law Medical Officers, held on the 24th instant, the following resolutions were unanimously adopted.

"1. That, in the opinion of this Committee, the Poor-law medical officers of England are under a deep debt of gratitude to Richard Griffin, Esq., of Weymouth, for the untiring zeal, energy, and time, which, for nearly ten years, he has bestowed upon the cause of Poor-law medical reform. That the concession to the Poor-law medical service recommended by the Select Committee on Poor Relief (England) is doubtless, in a very great measure, due to the perseverance and forbearance with which Mr. Griffin has invariably advocated the claims of his Poor-law medical brethren. That, therefore, it is hoped the whole Poor-law medical staff of England will unite with a view to some suitable acknowledgment of his past laborious services.

"2. That the present Committee of the Metropolitan Poor-law Medical Officers, with power to add to their number, do form themselves into a Committee for the purpose of giving practical effect to the above resolution.

"3. That Dr. Robert Fowler, of 145, Bishopsgate Street Without, be appointed Treasurer and Honorary Secretary to the Griffin Testimonial Fund.

"4. That the Honorary Secretary do issue printed circulars to all the metropolitan Poor-law medical officers, soliciting their active co-operation and subscription for the object of, firstly, defraying the outstanding expenses pertaining to Mr. Griffin's Poor-law Medical Reform Fund; and, subsequently, enabling the whole body to present him with such a testimonial as may hereafter be determined upon."

I trust to have a handsome response to this appeal. The Poor-law medical officers will, I am sure, acknowledge, not only that our indefatigable champion must not be out of pocket by his exertions in our behalf; but, also, that he deserves something more than bare

thanks at our hands. I beg, therefore, the means to give him a practical expression of our gratitude.

I am, etc., ROBERT FOWLER, M.D.,  
Hon. Sec. and Treasurer.

145, Bishopsgate Street Without, June 25, 1864.

## Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a general meeting of the Fellows, held on Saturday, June 25th, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College.

Fagge, Charles Hilton, M.D., 13, Trinity Square  
Harrington, James Douglas, M.B.Oxon., The College, St. Bartholomew's Hospital  
Lattey, Abraham H. H., 4, Gloucester Gardens, Hyde Park  
Mackenzie, Morrell, M.D., 13, Weymouth St., Portland Pl.  
Murray, William, M.D., Durham, Newcastle-on-Tyne

APOTHECARIES' HALL. On June 23rd, the following Licentiates were admitted:—

Bradley, Charles, Nottingham  
Smith, Thomas Haywood, Alcester, Warwickshire

At the same Court, the following passed the first examination:—

Adams, Frederick William, Bristol Medical School

#### APPOINTMENTS.

##### ARMY.

BARNETT, Staff-Assistant-Surgeon O., to be Assistant-Surgeon 12th Lancers, *vice* C. J. White.

CREBAR, Staff-Surgeon J., to be Surgeon 106th Foot.

DAVIE, Assistant-Surgeon G. S., M.D., 74th Foot, to be Staff-Assistant-Surgeon, *vice* T. Dolan.

DOIG, Staff-Assistant-Surgeon A., to be Assistant-Surgeon 79th Foot, *vice* G. S. Davie, M.D.

FRASER, Staff-Surgeon D. A. C., M.D., to be Surgeon 163rd Foot.

GILLESPIE, Assistant-Surgeon F., M.D., 35th Foot, to be Staff-Assistant-Surgeon, *vice* D. S. Skinner.

GILLESPIE, Assistant-Surgeon R. M.D., 74th Foot, to be Staff-Assistant-Surgeon, *vice* A. Doig.

MCGOWAN, Staff-Assistant-Surgeon A. T., to be Assistant-Surgeon 63rd Foot, *vice* W. W. Mills.

MALDEN, Assistant-Surgeon I., 60th Foot, to be Staff-Assistant-Surgeon, *vice* W. M. Webb.

MEKLEHAM, Surgeon-Major G. C., M.D., 70th Foot, to be Staff-Surgeon-Major, *vice* D. D. McDonald.

MILLS, Assistant-Surgeon W. W., 63rd Foot, to be Staff-Surgeon, *vice* D. A. C. Fraser, M.D.

REID, Surgeon B. W., 70th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.

SICCLAIR, Staff-Assistant-Surgeon E. M., M.D., to be Staff-Surgeon, *vice* J. Creagh.

SICES, Staff-Surgeon W. M., M.D., to be Surgeon 100th Foot.

WEBB, Staff-Assistant-Surgeon W. M., to be Staff-Surgeon, *vice* D. C. Wodsworth.

WHITE, Assistant-Surgeon C. J., 12th Lancers, to be Staff-Surgeon, *vice* W. M. Skues, M.D.

WODSWORTH, Staff-Surgeon D. C., to be Surgeon 70th Foot, *vice* G. C. Mekleham, M.D.

VOLUNTEERS. (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

HALL, F. R., Esq., to be Assistant-Surg. 1st Cambridgeshire R.V.

#### DEATHS.

FOOTE, Richard F., M.D., at 16, Blomfield Street, Westbourne Terrace, aged 37, on June 16.

LINGEN. On June 3rd, at sea, aged 20, Charles James, eldest son of \*Charles Lingen, M.D., of Hereford.

SQUIRE. On June 27th, at Portland Cottage, Studley Road, aged 68, Charlotte, widow of the late William Squire, Esq., Surgeon Wandsworth Road.

THE PRINCE AND PRINCESS OF WALES have done Dr. Sieveking the honour of standing sponsors at the christening of his child. The christening took place at St. Thomas's Church, Marylebone, the Prince and Princess being represented by the honourable Mrs. Stonor and Mr. Wood of the household. A gift

of a fine gold cup, with spoon, knife, and fork, were presented, bearing the inscription "Alexander Edward Sieveking, from his godfather and godmother, Albert Edward, Prince of Wales, and Alexandra, Princess of Wales. June 24th, 1864."

**POISONING BY BUTTERCUPS.** At Dartford lately a child was poisoned through eating buttercups.

**ROYAL COLLEGE OF PHYSICIANS.** The following gentlemen were on June 25th, elected officers of the Royal College of Physicians. *Censors:* P. Black, M.D.; C. West, M.D.; C. H. Jones, M.B.; W. R. Basham, M.D. *Treasurer:* J. Alderson, M.D. *Registrar:* H. A. Pitman, M.D. *Examiners:* a—on the *Subjects of General Education:* F. Hawkins, M.D.; J. Spurgin, M.D.; H. Thomson, M.D.; b—on the *Subjects of Professional Education. Anatomy and Physiology:* W. O. Markham M.D.; W. S. Kirkes, M.D. *Materia Medica, Chemistry, etc.:* G. O. Rees, M.D.; W. Odling, M.B. *Principles and Practice of Medicine:* T. A. Barker, M.D.; J. E. Bennett, M.D. *Principles and Practice of Surgery:* F. Le Gros Clark, Esq.; C. G. De Morgan, Esq. *Midwifery and the Diseases peculiar to Women:* A. Farre, M.D.; R. Barnes, M.D. *Librarian:* W. Munk, M.D. *Curators of the Museum:* J. Alderson, M.D.; G. H. Roe, M.D.; W. Wegg, M.D.; F. Sibson, M.D.

**DR. A. MACDOWALL**, of Helensburgh, died at Helensburgh on June 10th, after a long and tedious illness, at the early age of 33. On the breaking out of hostilities in the Crimea, he volunteered as surgeon in the Turkish Contingent force, which was quartered at Kertch and Yenikale. In his capacity of regimental surgeon, Dr. Macdowall distinguished himself by his exertions in promoting the sanitary condition of the troops. For these duties he was specially mentioned in the despatches of the Director-General, and was among the few who were selected to receive from the Sultan the decoration of the Order of the Mejidie. He afterwards settled at Helensburgh.

**SUPERANNUATION OF UNION OFFICERS.** A Bill to provide for Superannuation Allowances to Officers of Unions and Parishes has been printed by order of the House of Commons. Under this Bill, the guardians may, with the consent of the Poor-law Board, grant to any officer in their service who shall become incapable of discharging the duties of his office with efficiency, by reason of permanent infirmity of mind or body, or of old age, upon his resigning or otherwise ceasing to hold his office, an annual allowance not exceeding in any case *two-thirds* of his then salary. No officer shall be entitled to such allowance on the ground of age who shall not have completed the full age of sixty years, and shall not have served as an officer of some union or parish for twenty years at the least.

**UNIVERSITY OF LONDON.** On Friday June 14th, Lord Palmerston received a deputation from the University of London, to urge the claims of the university to a distinct and appropriate building, if possible, upon the northern part of the Burlington House site. It was urged upon Lord Palmerston, not only that the claims of the university had been admitted by past governments of both political parties, but that the largely increased number of candidates, which now exceeded 1,000 annually, rendered at the present time a larger amount of space indispensable for the conduct of the examinations, and particularly of those in the practical department of anatomy in such a manner as to secure a continuance of the confidence the public at large had shown in the university. Sir F. Goldsmid particularly reminded his lordship that

there was an implied undertaking on the part of the government of which Mr. Spring Rice was Chancellor of the Exchequer, when University College surrendered the charter empowering it to grant degrees in favour of a wider and more truly national institution, that a building adapted to the wants and position of the university should be provided for them. Lord Palmerston expressed the favourable view he took of the claims of the university, and begged that plans should be laid before the government showing clearly the amount of space required. Earl Granville (Chancellor of the University) stated that the registrar was in communication for that purpose with the architect of the Board of Works.

**THE SURGEON OF THE ALABAMA.** A meeting of the students of the Charing Cross Hospital was held on the 27th ult., for the purpose of considering what steps should be taken to erect a memorial to the late Mr. David Herbert Llewellyn, surgeon to the *Alabama*, and formerly a student and silver medallist of the school. Mr. Travers, having been called to the chair, said that as at a former meeting of the students it had been resolved to open a list for subscriptions, so that a suitable memorial might be erected to the memory of their late fellow-student, of whose noble disinterestedness so much had already been said, on the present occasion he wished only to state that the medical and surgical officers of the hospital were desirous of cooperating with the students in the matter, and that Dr. Headland had kindly consented to act as treasurer. A committee of six gentlemen was accordingly chosen. It was resolved that, with the concurrence of the latter committee, advertisements should be inserted in the morning papers and the weekly medical journals, so that former students might know of the movement, and the public generally join in erecting some kind of memorial to mark their estimation of the late Mr. Llewellyn's noble disinterestedness in sacrificing his life rather than imperil the lives of the wounded sailors in the sinking *Alabama*.

**MILLINERS AND TAILORS.** In the House of Lords on June 16th, the Earl of Carnarvon said that, some time ago, a commission was appointed, in consequence of the death of a milliner's workwoman under painful circumstances, to inquire into the state of the rooms in which they worked and into their hours of labour. He wished to know when the report of that commission would be produced. He also wished the noble earl to accelerate the production of the report of the commission with respect to tailors' working rooms. Earl Granville was understood to say that there could be no objection to do what the noble earl had suggested; and as to the report of the commissioners he had made inquiries and he found that it would be presented before the end of the present session. The Earl of Shaftesbury thought the commissioners had formed a wrong judgment in not presenting their report in reference to the milliners and dressmakers at the beginning of the session. But he understood that instead of doing that the commissioners had waited to combine with it their report on the needle and sloop women working at the East-end of London. He was glad his noble friend had called attention to the case of the tailors; for, although they did not come within the classes to be inquired into, yet the waste of life amongst them was such as to make it of the greatest importance to them and their families that the evils which affected them should be redressed. The great importance of the matter could not be measured only by the waste of life, but by the waste of health also, which every year threw thousands upon the poor rates.



# Abstract of Lectures

ON THE

## PROGRESS OF SURGERY DURING THE PRESENT CENTURY.

Delivered at the Royal College of Surgeons.

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A. Cantab.]

### LECTURE II.

QUITTING the merely preliminary and general matters which had engaged him in the first lecture, Mr. Fergusson proceeded, in his second, to announce a subject well calculated, when promulgated by him, to stimulate the curiosity of his audience to the utmost; viz., "Conservative Surgery". After some general observations relating to the importance of the free admission of new ideas and inventions in our art, Mr. Fergusson proceeded to introduce his subject in these terms.\*

"Amongst various characteristics of modern surgery, I shall now venture to draw special attention to a field in which I have myself been a humble labourer. To save life and limb is a grand feat; it may be said to be the highest reach in surgery. There is a stronger feeling abroad at the present time than when I was young, that amputation should be avoided by every possible reasonable means. Whilst watching on my own account, I perceived around me indications that others as well were thinking on this subject; and, already, proof had been given that the amputating-knife was no longer necessary in many instances like those where it had previously been freely applied. That such a result has finally come about no one can hesitate to admit; and, as a familiar illustration, I may at once refer to the treatment of disease of the elbow-joint. If synovial membranes, cartilages, and bones seem irremediably diseased, or, in other words, beyond hope of cure within reasonable time, instead of performing amputation, the tissues chiefly affected are removed by a local operation; and the forearm, with hand, are left so little damaged that the limb may ultimately, as has often been proved, be nearly as useful as its fellow."

After this illustration, which indeed is sufficiently familiar, the lecturer went on to speak of other matters still more so—such as the mistakes that are sometimes made with reference to the possibility of saving the end of a finger or thumb when the phalanx is diseased. This, however, hardly seems an illustration of Mr. Fergusson's subject. That subject, if we understand it rightly, is to show that, in hopeless and incurable disease of certain parts, a partial operation (as that of excision) is preferable to the radical operation of amputation. To this theory of partial operation Mr. Fergusson has applied what appears to the present writer the very happy name of "conservative surgery". But this theory is not in any way illustrated by the unfortunately undeniable fact that surgeons may be found so ill educated or so negligent as to recommend amputation of the end of the thumb when no operation whatever is requisite,

nor indeed anything in the way of treatment at all, except to pick away a piece of bone when it becomes loose. There is no question of principle here: the theory of the case would have been admitted, as well by the surgeon who recommended amputation, as by Mr. Fergusson, who told the patient to wait till the bit of bone became loose, had the former been able to diagnose the facts of the case. But the question involved in the theory of conservative surgery is quite different. The facts and diagnosis of the cases of diseased knees which Mr. Fergusson excises, and which some surgeons amputate, are as well known to the one as to the other; but their theory of treatment is different: the one deliberately prefers excision as the treatment; the other, as deliberately, and with as full a knowledge of the case, recommends amputation. Mr. Fergusson apologised for his cases of necrosed phalanx as being trivial; but the real objection to them was, that they were irrelevant.

The lecturer then went on to claim the term "conservative surgery" as his own invention.

"With a conviction, founded on practical experience, that many limbs and members had been sacrificed by amputation which might have been saved; that deeds had been done which, on a superficial glance, seemed as high art in our profession, when in reality they were indications of weakness, being the very *opprobria* of our calling, I ventured to draw attention to such matters in a paper in the *Medical Times and Gazette*, published on the 3rd of January, 1852, wherein I first made use of the term 'Conservative Surgery'."

"Since my views on conservative surgery were first disseminated, I have observed with regret that some have alluded to the term without having a proper appreciation of its meaning. To treat a fracture in the ordinary way, to cure an ulcer, to deal successfully with a chancre with or without mercury, have been alluded to as examples of this sort of practice. Surgery is emphatically preservative or conservative in such cases; but the phrase was coined and used as applicable to a line of practice whereby the loss of a limb might be averted, and the meanest act of surgery—namely, amputating for seemingly incurable local disease—might be superseded by more perfect adaptation of surgical science and art."

As instances of what is truly to be called conservative surgery in the sense in which Mr. Fergusson first used the term, he brought forward Sir B. Brodie's operation of trephining the tibia in chronic abscess, and John Hunter's of tying the femoral artery in aneurism, as being in either case the substitute for amputation of the limb. In the sequel of the lecture, Mr. Fergusson produced many more illustrations of "conservative surgery". By comparing all these illustrations together, the reader will see that Mr. Fergusson understands by this term that branch of surgery which, in cases where operations are necessary, teaches by what operation the disease can be cured with the smallest possible mutilation. These illustrations were as follows. In the first place, in order to show that extensive disease in the soft parts, provided such disease was not cancerous, is no necessary obstacle to the success of operations performed in the diseased region, Mr. Fergusson referred to drawings of a case (we presume, in his own practice) which was one of the first excisions of the elbow in this city; showing how great was the disease in the soft parts before the operation, and how completely it subsided after operation. We quote the following remarks on this subject.

"I believe that there are few doubts now on this subject, as regards this individual locality; yet how many will admit, how many will deny, the doctrine as applicable elsewhere? Are there six surgeons in

\* In extracting from the text of these lectures, I have made use of the reports in the *Lancet*, from the author's MS.

England who have amputated at the knee for white swelling? Is the scrofulous swelling round the diseased ankle, are the foul ulcers and sinuses in such swelling, not, even yet, considered as serious, aye, insuperable, objections to amputation at that joint? and has it not been proved beyond doubt that the sinuses and ulcers close, and the swelling subsides, soon after the diseased articular surfaces are removed?"

Next, in the removal of tumours, he dwelt on the very important fact that it is hardly ever necessary to sacrifice any of the skin which covers them. His illustration of this was most striking; viz., drawings of a patient, before and after operation, from whom Mr. Liston removed an enormous tumour of the face. Though the tumour seems to have been half as large as the whole face, and the skin was therefore enormously stretched, and though the portion of skin taken away was only "an oblong strip, about an inch or more in breadth, from the mouth to the temple," and though the edges of the wound came nicely together at the time; yet the patient, on recovery, had a large gap opening into the mouth.

The next illustration was taken from tumours of the jaw, in which Mr. Fergusson dwelt on the importance of removing only the diseased part, so that the base of the lower jaw, or the orbital plate of the upper, may be left to obviate mutilation. He added the necessary caution, "provided the tumour is not malignant, for then even the removal of the whole bone is a questionable step."

The same doctrine—viz., that it is not necessary to remove the whole bone in cases of innocent tumour—Mr. Fergusson went on to apply to the long bones; so that, in case of innocent disease of the lower end of the tibia, it would not be necessary to amputate in the thigh; and protested formally, "as Professor of Human Anatomy and Physiology", against the doctrine "that there is a peculiar circulation in a long bone, whereby, if disease be removed by amputating one end only, the vessels will be sure ere long to work in a similar manner in the end that is left." If such a doctrine is really held by any surgeon, no doubt Mr. Fergusson's protest has banished it from the minds of his hearers; but we can hardly imagine any one to hold a doctrine which would involve the idea that if the leg be amputated for caries of the lower end of the tibia, the disease will recur in the knee-joint.

After a rapid glance at the various examples of conservative surgery which might be drawn from the partial excisions and amputations in the foot and hand (in which part of the lecture surely the recent revival of the excision of the wrist by the Scotch surgeons deserved more distinct notice), the lecture concluded with three more illustrations of conservative surgery. The first was the excision of the scapula, illustrated by the exhibition of a tumour nearly the size of the fist, implicating the lower angle of the scapula, and removed by a partial excision of that bone. Two years have now nearly elapsed without a return of disease. In connexion with this case, Mr. Syme's original operation for removing the scapula was mentioned, and a figure was produced of the patient from whom the late Mr. Jones of Jersey removed the scapula. It may, however, be remarked as to the latter case, that the operation bears so close a resemblance to the mere extraction of a sequestrum that it can hardly illustrate any new point of practice. Mr. Fergusson's second illustration was a much more interesting one; viz., a contrast between the figure of a man from whom Mr. Syme removed first the head of the humerus implicated in a tumour, and afterwards the scapula, in which the disease had returned, preserving an useful arm, and the figure of

a patient from whom Mr. Fergusson himself removed the scapula, after the arm had been removed at the shoulder-joint by another surgeon. This was a real and striking illustration of the value of conservative surgery, allowing that the cases were originally similar. The perfectly useful forearm and hand and partially useful arm of the former patient contrasted most impressively with the miserable mutilation of the latter. Lastly, Mr. Fergusson showed drawings of the lower limbs extensively affected with necrosis of the femur and diseased knee, with drawings of the necrosed bone removed, and casts of the limbs after excision of the knee. In one case, the treatment, though successful as far as the limb went, was frustrated by the occurrence of hip-disease; in the other, the lad is still alive, and was exhibited in the theatre. Mr. Fergusson concluded in these words, "Here is the boy himself, with the leg that was preserved. He can stand upon it for hours, and walk miles daily. Of all my feats of conservatism, I know of none of which I am prouder."

Such were the principal topics of Mr. Fergusson's lecture on Conservative Surgery—a lecture in which some topics that ought to have been subordinate were put forward so prominently that it was difficult at first to catch its real drift and importance. It almost seemed, at first hearing, as if the chief merit which Mr. Fergusson wished to claim for himself was that of having invented the name Conservative Surgery.\* Now, this name, though it may be a happy one (and we think is so), could have been given by any one; its invention is a matter of no importance—a matter which a man like Mr. Fergusson could afford to pass over without notice. But the merit of this lecture is that it brought together a large number of striking, and most of them incontestable, examples of the important fact that, in operations for innocent disease (whether inflammation and its results or new growths), much more of the body might be saved than any surgeon thought possible fifty years ago—more than many surgeons believe even now. His lecture, though necessarily destitute of method, and, perhaps, somewhat wanting in clearness, shows how fertile in results this great idea is, and what the lecturer has done in realising some of those results.

\* Calling surgery "conservative," seems to us very much like asserting of sugar that it is sweet, like the painting of a rose, or the adding of a scent to the violet. All surgery is essentially conservative. The surgeon's object is to preserve limb and life and restore health. If surgeons now save limbs in cases where surgeons formerly cut them off, all that is to be said about the fact is plainly this: that surgical knowledge is more advanced now than it was formerly. The term "conservative surgery," we confess, sounds to us as a pleonasm; or it suggests, that those surgeons who differ, or who have differed, from others, in points of practice, are engaged in "destructive" surgery. ED1104E.

**LUNATICS IN IRELAND.** In the House of Commons on the 1st inst., Mr. Blake called the attention of the Chief Secretary for Ireland to the necessity for amending the laws relating to the administration of lunatic asylums in Ireland, and for making better provision for the care of imbeciles confined in the union work-houses. Sir R. Peel said he did not think there was any need of further legislation, and replied to various points raised by Mr. Blake, observing that the subject had not failed to attract the attention of the Irish government.

**SPONTANEOUS GENERATION.** The lectures of M. Joly, on spontaneous generation, at the Ecole de Médecine, attract as many hearers as did either those of Renan, Minet, or Michelet, at the College of France. Each evening that M. Joly lectures many a paletot is sacrificed in the rush which is made by several hundred men.



# Lettsomian Lectures

ON

## MIDWIFERY AND DISEASES OF WOMEN.

*Delivered before the Medical Society of London.*

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

### LECTURE III.

#### THE TREATMENT OF FIBROUS TUMOURS.

MR. PRESIDENT AND GENTLEMEN.—The treatment of uterine fibrous tumours forms the subject of our consideration to-night; and I shall speak, first, of the therapeutical measures which have been recommended; and, secondly, of the surgical appliances which have been found most efficacious.

I. THERAPEUTICAL REMEDIES. Several remedies have been recommended; but of these, the only three to which I shall refer are mercury, iodine (and its analogue bromine), and the liquor calcii chloridi.

From the time of Sir A. Cooper down to the present day, the discutive properties of *mercury* have been well known in cases of internal enlargement, and especially in cases of uterine disease. Combined with local depletion, I know of no more efficient remedy in arrested involution of the impregnated uterus, and in hypertrophy of this organ. But I have seen some cases of uterine fibroid where I think the enlargement has diminished under its use. I do not say that it has entirely disappeared. In mere thickening and hypertrophy, it is without doubt very efficient.

On the use of *iodine* and *iodide of potassium*, the writings of Dr. Ashwell are so well known and explicit, that incidental allusion only is required. He gave iodine internally, and applied an iodine ointment locally to the cervix. The resolution was sometimes effected in from sixteen to eighteen weeks. This was especially the case with cervical tumours. In hard tumours of the walls, however, he admits that the remedy, as a discutient, was of no avail; at most, it prevented only further increase. Dr. Simpson, on the other hand, recommends the bromide of potassium. In my hands, I must confess, that these remedies have not proved so useful as the bichloride of mercury.

More lately, Dr. McClintock has recommended the use of the *liquor calcii chloridi* (*Dublin Pharmacopœia*); but I have no experience in its use. In one case only, I gave it to the extent of eighty drops three times a day for four months. It seemed to give the patient comfort, and a slight relief to her symptoms; but the tumour did not become sensibly smaller.

The absorption, however, of fibroids which are imbedded in the uterine walls, is precisely that which we have been chiefly discussing; and these tumours are exactly those upon which those remedies are least operative.

*Hæmorrhage.* The symptom which seems to give

rise to the greatest inconvenience in these cases, and calls most for treatment, is hæmorrhage. If this depend on hepatic congestion, or be accompanied with it, I believe no remedy is so efficient as mercury. In these cases, also, oxide of silver, in doses of one to three grains with half a grain of extract of Indian hemp, has often acted very decidedly; although, in some instances, the oxide of silver has appeared to purge. In other instances, no such operation has been observed; but the hæmorrhage has ceased. Sulphuric acid and gallic acid, also, as most of us have doubtless observed, are powerful remedies in arresting the hæmorrhage. Without doubt, however, turpentine is the surest remedy, if the patient's stomach can bear it. Better still is a mixture of dilute sulphuric acid and turpentine; but the women that can bear to take this atrocious compound are very few and far between. Ten minims of oil of turpentine in a mixture three times a day has sufficed to arrest the flow of blood in two or three days. Sometimes, however, all these remedies fail; and more energetic measures are demanded, and these are chiefly *local* in character.

There are three ways in which, locally or by manual operation, the hæmorrhage may be arrested—at least, for the time. These are: 1, injection; 2, cutting open the internal os; 3, directly cutting upon that part of the mucous membrane which covers the fibroid projecting into the uterine cavity. I do not, of course, allude here to polypi.

1. *Injections.* It is unnecessary that I should refer to this method of arrest at present, as I have already published my views on this subject at length, in a paper which you may all read, in the *Obstetrical Transactions*. I will only add a few words, in justice to a colleague of mine, Dr. Savage, whose name, although I gave him due credit in that paper for the discovery, has been overlooked. The scraping of the uterus by an uterine gouge was a French innovation. The injection with tincture of iodine, *after* dilatation by a sponge-tent, was Dr. Savage's discovery. The previous dilatation allows the escape of the fluid subsequently injected; and then those acute pains, which occasionally determine peritonitis when the uterus is injected without previous dilatation, are avoided. Dr. Savage prefers to inject iodine; that is, the strong Edinburgh solution undiluted. I like the tincture of sesquichloride of iron. I have never known an instance where, under this treatment, the hæmorrhage has not ceased for the time; I mean in fibroids. Of course, in ordinary cases of menorrhagia, the result is permanent.

I may mention two cases of fibroid tumour. One was a patient of Dr. Savage's, whom he transferred to me. She had an enormous uterine fibroid. At every monthly period the catamenial flow was profuse. The plan adopted was to inject the cavity, *after* dilatation by a sponge-tent, after the first or second day of the flow. It was always arrested, and never recurred till the next period, when it was again arrested in the same manner. The patient had time thus to rally and gain strength, and left the hospital much relieved.

The other case was remarkable in more ways than one. It was a case of fibroid and cancer combined, occurring in a young woman aged about 28. She came into the hospital completely exsanguine—with all the marked uncomfortable symptoms of anemia. The tumour was very large, and extended above the umbilicus. The hæmorrhage was copious, amounting to

flooding at every period. The odour of the blood was in no way cancerous. This patient had *sponge-tents first used*; and in the exploration by the index finger, these fungoid growths here shewn were made out, but supposed to be merely mucous polypi. Portions of these were scraped away by the gouge, and she was consequently injected with tincture of sesquichloride of iron. The hemorrhage was arrested instantaneously; and it was quite pleasant to see how the patient rallied during the month, getting flesh and colour and walking about, in fact, able once more to enjoy life. This treatment was repeated three or four times, and she was greatly better. A fifth time the menstrual period recurred; and I was thinking of injecting her the next day. On my arrival, I found her in a state of high fever, with abdominal tenderness. It proved to be acute peritonitis. It was fortunate for me, that I had not injected her now, else I should have concluded that the peritonitis had been due to the injection. The *post mortem* examination revealed the state of things you see represented in this drawing. The tumour was fibrous, with cancerous masses here and there.

2. Another means of arresting the hemorrhage is by *incising the os*. I do not stop here to inquire as to who was the discoverer of this mode of procedure, and as to whether the merit is to be claimed by America, England, Ireland, or France. Of its practical value, I am convinced. It is a plan we have carried on at least for two years at the Samaritan Hospital. I explained the *modus operandi* of this incision in my second lecture.

3. Equally effective is Dr. Atlee's plan of *incising the mucous membrane* over a tumour projecting into the cavity. To the *modus operandi* in this case, I also referred in my previous lecture; and, therefore, I need not detain you any longer upon this point.

*Treatment by Electricity.* It is now many years since I was consulted by a lady for what appeared to be a fibrous growth of the breast.

It was a large tumour, of about the size of a turkey's egg, very hard, resistant, and producing some sickness on pressure. It gave rise to considerable anxiety at the time; more especially as the mother had just died of cancer, and an aunt had also succumbed to the same affection. Reflecting on the fact that, if in an ordinary galvanic battery a quantity of fresh meat is placed in connection with the positive pole, this rapidly putrefies, and believing that this fact, which I noticed years ago, was explanatory of the putrefaction of meat even in very cold countries at periods when the atmosphere is surcharged with positive electricity; it occurred to me that, if I could place this tumour in the same position, I should lead to its oxidation or decomposition, and so cure my patient. I did so. A zinc plate was moulded to the affected breast; a copper one to the healthy one. Interposed between the breast and plate, in both cases, was a piece of calico dipped in vinegar. In six weeks the cure was complete.

I was not so successful in a case of fibro-cystic disease. Here the disease made its progress apparently unaffected, and I was compelled at last to amputate the breast. The disease was radically cured.

Another case in which I tried electricity was one of fibroid of the uterus. C. B., aged 44, was admitted under my care, at first for a few days, subsequently for a longer period. (My notes of her case on first admission are meagre.) The patient was a rickety diminutive subject. She had been married nineteen years, but was childless. She had been usually regular till within the last twelve months, since which

period she had suffered from dysmenorrhœa, and the catamenia had occurred only three times. Then they were copious, lasting four or five days, being very dark and clotty. They last appeared three weeks before admission. She first noticed the tumour eighteen months previously, in the iliac region of the right side. This was free from pain. She now complained of a great deal of pelvic pain and discomfort, and her motions were with difficulty passed. On vaginal examination, the os was found to be small, and the cervix prolonged. On the right side, in the position of the ovary, but lower down, was a hard tumour, which pushed the womb to the left side, and was seemingly attached to it, moving the latter slightly when moved itself. The movement, however, in the tumour itself, was limited. It filled the entire pelvic cavity, and extended above the pelvis. Pressure made above was felt in the vagina on the finger. The tumour was intensely hard except at one point. Here it was doubtful if there were not obscure fluctuation.

She was re-admitted December 11th, 1853. Since her former admission, the patient had been taking bichloride of mercury, except for about a month when she caught cold. The following points were now made out. The sound penetrated only three-fourths of an inch. Two tumours could now be felt in the abdomen; one to the left side and towards the median line, and projecting about an inch above the pubes; the other tumour, much larger and thicker, projecting two or three inches above the pubes, and placed more towards the right side. Pressure from above was responded upon the index finger in the vagina. The pelvis, as before, was occupied by a large tumour, which seemed to be made up of the entire uterus uniformly enlarged. The os was very small, looking backwards and downwards.

An attempt was made to dilate the os by sponge-tents. This failed. Subsequently, assisted by my friend Dr. Althaus, I passed a strong electrical current of high intensity through the tumour, placing as the positive pole an iron sound covered with gutta percha except at its distal end within the os as far as it could go; and the negative pole at the back opposite the sacrum. This was continued unremittingly for two hours. The effect was to cause the os to dilate a very little. It gave rise to a great deal of pain in the back, described by her as that of a large pin sticking into her. This was at once relieved on disconnecting the pole. This treatment was persisted in for four days. No greater effect upon the os was produced. The electricity seemed to give her pain subsequently to its removal. The catamenia appeared on January 1st, when the treatment was suspended, to be resumed again on the 4th. No effect appeared to have been produced upon the tumour by the electricity up to the 17th, when she left the hospital. An ulcerated spot had appeared on the back: no doubt, induced by the current; and a similar spot upon the os uteri and part of the cervix. This was more to be regretted, as the latter gave rise to as severe a gonorrhœa in the husband as I ever saw. In the long run, however, it seemed to do good. The tumour, in the course of a year, was become about as small as the fist, and all unpleasant sensations in connection with it had disappeared. I have seen this patient lately. The tumour is not now to be felt.

The employment of electricity to act upon fibroids is comparatively new. In future experiments, I purpose applying it by means of wires in the centre of the tumour; in this way, destroying and solidifying all the blood about the needles, without contact with the external air. I hope I may thus succeed in ex-



citing in it the process of absorption. The following remarks by Dr. Althaus are interesting, as exemplifying the absorptive action of electricity in cases of glandular tumours.

"Paradisation and galvanisation may be usefully employed for certain tumours, especially of the glandular kind, and some forms of struma; and are chiefly to be recommended where surgical operations are impracticable, on account of the seat of the tumour, or where the patient is averse to such operations. A striking case of this kind occurred a short time ago in the practice of Professor Langenbeck and Dr. Meyer of Berlin. The patient suffered from a hard glandular tumour, as large as the head of an adult, and lodged between the head and the right shoulder, filling up the space between the lower jaw, the mastoid process, and the linea semicircularis inferior of the occipital bone, and extending backwards in the direction of the vertebral column, which was dislodged towards the left side. The circumference of the left side of the neck was only six inches, while that of the right side was no less than fourteen. After fifty-six applications of the induced current, the tumour was reduced to one-half of its previous size, and by further treatment its bulk was still more diminished. In such cases, each operation should last for about an hour, and the treatment must be persevered in for a considerable time if beneficial results are to be obtained. Galvanisation seems, in the treatment of these affections, equally valuable as Paradisation."

[To be continued.]

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ROYAL ALBERT HOSPITAL, DEVONPORT.

COMPOUND HYDATID CYSTS OF LIVER: PERFORATION OF DIAPHRAGM.

Reported by VIVIAN WEARNE, Esq., House-Surgeon.

CHARLES A., aged 49, a mason, was brought in dead on January 26th, 1864. The history of the case was that, after ascending a ladder with a hod of mortar on his back, he stumbled forward on reaching the scaffold, and expired immediately. Previously, he had made no complaints of being in ill health. He had been a temperate man, and enjoyed good health.

**AUTOPSY** forty-eight hours after death. The body was in good condition. The brain was congested, but normal. The heart was flabby; there was slight thickening of the mitral valves. The lungs were intensely congested, but swam in water. On the right side, the diaphragm encroached on the cavity of the thorax, extending as high as the fourth rib; on the left side, as high as the fifth rib. A white albuminoid substance was adherent to the thoracic surface of the diaphragm. On removing it, some jelly-like matter, followed by some small hydatid cysts, exuded through a perforation of the diaphragm. The liver was adherent to the diaphragm, stomach, duodenum, and vertebral column: it was very friable. The left lobe was occupied and replaced by a large collection of hydatid cysts. One large compound

hydatid cyst, of about the size of a child's head, had its base of attachment from the right lobe; on its under surface was a thin layer of liver-substance, about a quarter of an inch in thickness; this was the only remains of the left lobe. This cyst was filled with hydatid cysts and shrivelled hydatids. These secondary cysts, over two hundred in number, varied in size from that of a hen's egg to that of a pea. There were other large primary cysts; one, about the size of an orange, contained a clear fluid, with many hydatids in the fluid; another one contained only shrivelled hydatids. The whole formed a huge mass, and had formed adhesions to, and afterwards perforated, the diaphragm. The kidneys were healthy. The stomach was loaded with the contents of a recent meal, of healthy structure; it was adherent to the liver.

I would only remark on the slight derangement to the general health, from a disease which must have had its origin at some distant period. The congestion of the lungs was the immediate cause of death; whether it was caused by the perforation of the diaphragm, or by active exertion after a hearty meal by a man with a feeble heart, could not be ascertained.

## Original Communications.

"TIS SIXTY YEARS SINCE."

DR. GEORGE FORDYCE.

By THOMAS MARTIN, Esq., Reigate.

It is generally admitted that biography is one of the most pleasing and interesting, and perhaps one of the most useful, departments of our literature; and medical biography must be more especially so to members of the profession.

In the obituary of the *Gentleman's Magazine* for 1802 (p. 508) is a memoir of Dr. George Fordyce; and there is also an article in Dr. Aikin's *Biography* (vol. iv, p. 162) on the same eminent physician, medical writer, and lecturer. Either or both of these memoirs are sufficiently full and ample for the general reader; but the profession may have no objection to something more; and I am enabled, from personal knowledge of Dr. Fordyce as his pupil, to offer my recollections of additional facts and circumstances respecting him to the readers of this JOURNAL, in the following statement.

On the 1st of October, 1796, I attended the introductory lecture of Mr. Cline at St. Thomas's Hospital. There was a well filled theatre. The lecture was delivered with a calm dignity in appropriate and impressive language, and was listened to with deep and silent attention by all who were present; and at the conclusion there were no noisy demonstrations of applause, often so inconsistent with propriety and good taste. Mr. Cline was always listened to with profound attention by all who were present; and, at the conclusion of each session, his valedictory address to those students who were about to leave the school would produce even tears from some who heard him; but it never occurred to the students of that day audibly to applaud a medical or a scientific lecturer.

It was determined that my school should be that of the then united hospitals. I must, therefore, have a lodging near at hand; and I took rooms at 22, St. Saviour's Church Yard, next door to Dr. Haighton's

houses, now removed to give additional space to the Borough Market.

Intending to have the benefit of Dr. Fordyce's lectures, after hearing Mr. Cline's introductory, I waited on Dr. Fordyce at his house at the bottom of Essex Street, in the Strand, introduced myself to him, and entered as a perpetual pupil to his lectures on the Practice of Medicine, Materia Medica, and Chemistry. These lectures were commenced at seven o'clock every morning; and, being given in immediate succession, we were often in attendance until ten o'clock. To be in time, I often did not walk—I ran; and this early morning exertion, I have no doubt, contributed to my uninterrupted good health during my residence in the Borough.

The upper part of the house was appropriated to the use of the class, which was composed of three or four from the Borough, a good many from St. Bartholomew's, several from Dr. Marshall's school in Bartlett's Buildings, and others.

In addition to the morning lectures, there was, every Thursday evening, a lecture on chronic diseases in organs, previously lectured upon in the acute forms. On these occasions, we were allowed to meet half an hour before the lecture began for a sort of *conversazione*, when there would be a brilliant assemblage. Young men, half asleep in the morning from early rising, were radiant with vivacity and smiles. Those from Bartholomew's were eloquent as respected Mr. Abernethy, who was their idol; Marshall's pupils looked up to him as their *Magnus Apollo*, who brought a good deal of Barclay's Edinburgh with him to London. We from the Borough school had not much more to say, than that Cline—the admirable Cline—was above all praise.

Some gave occasionally sent a barrel-organ down the street to entertain us during the lecture; but the Doctor, having a very quick ear, sent the performer an angry message that, if he did not depart immediately, he would break his instrument all to pieces.

Before my time, the Doctor had a country house at Chelsea, where he used to entertain parties of his students with beef and pudding; but latterly he gave them plain dinners in Essex Street.

Dr. Fordyce was one of the most intimate friends of Dr. William Hunter; the trustees of whose celebrated Museum, in addition to Dr. Fordyce, were Dr. Pitcairn and Dr. Combe. These latter being dead, Dr. Fordyce, the only survivor, kept the keys of the cabinets and the book-cases, and occasionally gratified parties of his pupils with the inspection of this magnificent collection of works of Art and Nature, rich in gems, medals, coins, and minerals—for mineralogy was studied to good purpose, although the modern science of geology—the anatomy and physiology of the cuticular surface of the earth—was then unknown. In fact, this department of science, now so much cultivated, is new, scarcely more than half a century old. In the Museum were most valuable manuscripts; early printed books—Caxton's and Wynkin De Worde's, the productions of the chief continental presses, the *incunabula* of the fifteenth century; and all the most magnificent specimens of typography on vellum and paper of the fifteenth and sixteenth centuries—the tallest and finest copies of the Greek and Latin classics. There were beautiful works of Italian art, in a vast variety of forms.

The anatomical preparations were numerous, and were collected from several sources. They were used by Mr. Cruikshank to illustrate his lectures.

These treasures, it is well known, were lost to our metropolis. The government of the day, Lord Bute's ministry, having made a sad mistake by their apathy and folly in neglecting Dr. William Hunter's repeated applications, he bequeathed his Museum to

the University of Glasgow, after a term of years for Dr. Baillie's use. This sad blunder on the part of the government manifested that at that time they were never sufficiently mindful of the importance and interests of science.

Dr. Hunter continued to add to his collections almost to his dying day; and Mr. Chevalier was of opinion, that he had expended on them to the amount of a hundred thousand pounds.

One of the most remarkable incidents in the life of Dr. Fordyce was the experiment he made, in conjunction with Sir Charles Blagden, on their own persons, by subjecting themselves to high temperatures in heated rooms. These experiments were made three times. On the third occasion, they ventured so high as 260° of Fahrenheit's thermometer; that is to say, to 48° above the heat of boiling water. Eggs and beef-steaks, placed on a tinned iron frame, were roasted as at a kitchen-fire, and as they themselves would have been, but for the conservative influence of the living principle. During the time they were exposed to this excessive heat, the pulse indicating the action of the heart was doubled in quickness; but in other respects these gentlemen, having completed their experiments, were not the worse for the trial they had undergone. The particulars are stated in the *Philosophical Transactions*, vol. lxx.

In the year 1788, the College of Physicians published a new edition of the *Pharmacopoeia*. Sir George Baker was then the President of the College. He was not only the most learned physician, but, as respected classical and general literature, one of the most learned men of his time. He and the other heads of the College entrusted to Dr. Fordyce the task of reforming the Codex, which he cheerfully undertook; and that edition bore abundant proof of the knowledge, skill, and judgment with which he completed and brought into effective utility the component parts of each formula. In fact, it was a perfect model of pharmaceutical and chemical talent. The new nomenclature also denoted the principal ingredient in each formula.

In Dr. Fordyce's lectures on the Practice of Medicine, he did not profess to follow any recognised theory or system; although he seemed to take Cullen's *First Lines* as a model, and he had attended Cullen's lectures. He enunciated certain principles as he went on, and introduced a good deal of physiology, or what he called the "natural history of the human body"; and the *methodus medendi* was the result of his own experience. Certainly he had no blind devotion to any given nostrum or any particular theory; he prescribed according to what he considered to be the indications. He was always anxious to reduce the pulse from being hard and wiry to a soft pulse; and this a good deal by relaxants, of which the chief were, in the first instance evacnants of the stomach and bowels, and then antimonials. His endeavour was to correct the secretion, and induce a return to harmonious action of the various internal organs. He did not hesitate to use the lancet in appropriate cases and in moderation, and much in the way that Dr. Clutterbuck afterwards was remarkable for. He was sometimes satisfied with emptying the bowels, and then giving the "Darby and Joan", with an appropriate diet, more or less supporting; and of the *materia medica*, he gave a good deal of sarsaparilla and of Peruvian bark. His practice, on the whole, was very successful. He was the senior physician of St. Thomas's; the other physicians being Drs. Lister and Ainslie, and Dr. Wells (celebrated for his researches on dew) assistant-physician.

On reflection and recollection, I cannot conceive of a physician who could be more judicious in practice;



prescribing for each case according to the circumstances and peculiarities, for which he had a quick discernment; and certainly he was not addicted to any "extremes in practice".

His Thursday evening lectures on Chronic Diseases were equally the result of a wise and judicious application of his experience as to diagnosis, prognosis, and treatment. He always insisted much on the importance of discriminating between inflammation and irritation; and disapproved of the word *fever* being applied to mere quickness of pulse. He insisted also on the necessity of distinguishing between patients from Spitalfields and those from the country.

The syllabus of Dr. Fordyce's lectures on the Practice of Medicine was an octavo-volume of 376 pages, a copy of the sixth edition of which I have before me. It comprehended a sketch of human physiology, or, as he styled it, the "natural history of the human body"; and, I have no doubt, was then conformable to the newest and best elements of that branch of science.

In the history of the phenomena of diseases of the general system, or of particular organs, he seemed to have a pleasure in incorporating as much physiology and pathology as he could to illustrate his subjects.

In the doctrine of diseases, he was very clear on the subject of fevers, respecting which he was writing the results of his observation and experience on the symptoms, the distinctions, the diagnosis, the prognosis, and indications of cure, with the appropriate remedies. The same course of procedure he followed with respect to inflammations; and interspersed are fifty-five formulæ of medicinal compounds.

The Thursday evening lectures on Chronic Diseases were always, with their attendant circumstances, looked to with especial interest and pleasure. Dr. Fordyce's lectures on the *Materia Medica* were chiefly drawn from the *Pharmacopœia*, making more or less use of the *Materia Medica* of Cullen. The lectures on Chemistry were more pharmaceutical than scientific. He, however, rendered due homage to Black, Priestley, Cavendish, and others.

Many bodies hitherto considered to be elementary—that is, never having been decomposed—he had no doubt were compound bodies, and would some day prove to be so. For example, he had no doubt that the alkalies were compound bodies; and, shortly afterwards, Sir Humphry Davy touched them with his magic wand, and proved them to be so.

In lecturing, as well as in conversation, he retained his broad Scotch accent, apparently never having wished to get rid of it; but the delivery of his lectures was always attractive, from its being characterised by correctness and propriety of language. I always considered myself fortunate to have lived in the time of my venerable friend Dr. Fordyce, and to have enjoyed the benefit of his professional wisdom and knowledge; and, so long as I am spared, shall entertain for his memory sentiments of the highest honour and gratitude; presuming also that these few reminiscences of an eminent teacher may not be unacceptable to the readers of this JOURNAL.

In reference to the Borough school of the years 1796, 7, and 8, I may mention that tobacco-smoking was entirely unknown among all the officials of the hospitals, the medical staff and students, and, as I believe, among the patients, excepting a few old sailors and soldiers, who smoked their pipe after dinner. The subject was never mentioned, or in any way adverted to. We had a few Americans and West Indians, and one Dutchman (Dr. Outyd); but they never took the liberty of smoking, or ever mentioned the subject.

## PRACTICAL REMARKS ON THE TREATMENT OF CONGENITAL CATARACT.

By GEORGE LAWSON, Esq., Assistant-Surgeon to the Royal London Ophthalmic and the Middlesex Hospitals.

In the treatment of congenital cataract, the extent of the opacity of the lens, and its form, whether nuclear or striated, will influence very materially the mode to be adopted. In certain cases, the opacity is entirely nuclear; the eye, in a moderate or rather bright light, possesses very imperfect vision; but in twilight, or with the eye shaded, the sight is very materially improved. Such an eye, examined by oblique illumination after the pupil has been fully dilated with atropine, will exhibit a nuclear opacity of the lens, whilst its circumferential matter is quite transparent. The size of the central opaque portion varies considerably; and upon its extent will depend, in a great measure, the choice of the operation to be performed.

If it be not large, and a clear circumference exist, the operation of *iridodesis*, first introduced by Mr. Critchett, is called for. By altering the shape of the pupil, a clear portion of the lens is exposed, sufficient to allow the rays of light to permeate and to form a correct image on the retina. This application of the operation of artificial pupil to the treatment of certain cases of congenital cataract is an undoubted advance in ophthalmic surgery. It is an operation which, if properly performed, is perfectly free from danger. If, from an error of diagnosis or any other cause, it fail to give the benefit anticipated from it, it in no way precludes any other mode of proceeding which may be deemed advisable. If it succeed, as in well selected cases it will, it enables the patient to see and perform all his ordinary duties without the aid of spectacles; but this is not all, for the patient, seeing through his own lens, possesses a power of accommodation for near and distant objects; whereas, if he had to use spectacles, he would only have two distinct points of vision, his near or reading, and his distant sight.

There is yet another congenital state of the lens in which the operation of iridodesis is followed by very excellent results. The central and posterior part of the lens is opaque, but very limited in extent, and there are marginal striæ, but between these striæ there are clear and tolerably large interspaces, and the vision is materially improved when the eye is shaded sufficiently to cause a moderate dilatation of the pupil. Such an eye is qualified for the operation, but it requires to be performed with neatness and dexterity, for the new pupil must be made to correspond exactly with one of the large intervals between the striæ.

The operation of iridodesis having been decided on, the question is, in what position should the artificial pupil be made?

There are many points which influence the answer.

1. Supposing the eye to be a healthy one, with a normal fundus, a good range of movements of all the muscles, with control over their action; perfect steadiness in fixation, and without any of the oscillatory movements which are not uncommon in congenital cataract; a good field of vision, and a nuclear cataract, but with a perfectly transparent, broad, circumferential portion—then the position of the pupil which gives to the patient the best sight is slightly downwards and inwards.

2. If the lens exhibit opaque striæ, the choice of the situation of the pupil will be influenced by them. An interval as large as can be found between the striæ will be best suited, and the pupil should be

made either downwards and inwards, or downwards and outwards, according as the case permits.

3. In all cases, a careful examination of the eye should be made, to determine whether the fundus is healthy, and to ascertain the exact state of the field of vision, in order that a pupil may be so placed as to throw the image on the most healthy part of the retina.

It should be remembered that eyes afflicted with congenital cataract are, as a rule, congenitally weak eyes. They are usually below the standard in size of healthy eyes, and occasionally are very small. When both eyes are affected, which is commonly the case, one may be smaller than the other, and the small one is the most imperfect. Oscillatory movements of the eyes are frequent in congenital cataract; they always indicate a more or less unsound state of the fundus, and such are more prone to do badly after operation than eyes which are free from this defect.

Operations for getting rid of the opaque lens in cases of congenital cataract are by no means free from danger; for such eyes, being naturally weak, require to be dealt with, with even greater care, if possible, than eyes not similarly circumstanced; as they are often unable to resist the active inflammation which even a well performed operation sometimes occasions. A proper selection of cases, a judicious choice of the operation best qualified for each individual case, and a strict attention to minute details, will, however, in skilful hands, generally produce favourable results.

Against selecting iridodesis for the relief of congenital cataract, it might be urged, that a cataract once commenced in a lens will continue to increase until the whole is opaque. Such is usually the case in the cataracts of advanced life, but not in the congenital form. The opacity which was present in the lens at the time the child was born, may continue unaltered until he dies. Sometimes, however, after remaining stationary for many years, the nebulosity from some cause or other, difficult to explain, increases, and the whole lens becomes cataractous.

Iridodesis may, therefore, be performed in all cases which are fitted for it, without anticipating the future, as should the lens in time become more opaque, the artificial pupil will in no way interfere with the efficient performance of solution or linear extraction.

*Linear Extraction.* The operation known as Gibson's operation is well adapted to the large majority of cases where it is desirable to remove the opaque lens. It is, however, an operation which requires great care and great delicacy in the manipulation. The whole chance of success depends on the manner in which the different steps of the operation are performed, and on the careful fulfilment of every detail. It has been said that this operation is not nearly so successful as that commonly known as keratonyxis, or solution of the lens, by allowing the aqueous to permeate its interior through a small puncture of its capsule. Possibly, there may be truth in this assertion; but I believe that a large amount of the failures have depended on a want of a due appreciation of the difficulties which beset it, and a consequent neglect of the precautions necessary for a proper performance of it.

The operation may be divided into two stages.

1. To break up the anterior capsule of the lens so as freely to allow the aqueous to act on the lenticular matter.

2. To remove, by the smallest opening, the broken down lens from within the eye.

Prior to performing the operation, the pupil should be fully dilated with atropine, so that the whole of the lens may be under the observation of the opera-

tor, and the iris may be drawn away as far as possible from the chance of injury.

The first stage of the operation is to break up with a fine needle the anterior two-thirds of the anterior capsule of the lens, and by carefully moving the needle through the soft lenticular matter from point to point, so to break it up that every portion of it may be brought into contact with the aqueous. Often this may be best effected by giving to the extremity of the needle after it has entered the lens, a sort of stirring movement, during which pieces of soft matter will often float into the anterior chamber, and not unfrequently the nucleus or harder central portion will also come forward.

1. Great care must be taken not to injure the posterior layer of the capsule of the lens, as by so doing the hyaloid membrane will be ruptured, and the vitreous, mixing with the particles of the lens, will materially interfere with the due action of the aqueous humour on them, and also render more difficult the second part of the operation.

2. In breaking up the anterior capsule with the needle there is danger, if it be tough, of rupturing the suspensory ligament of the lens, so that the lens within its capsule can be freely moved at the point of the needle.

3. It is of the utmost importance not to bruise the iris, in the frequent movements of the needle.

4. The aqueous humour must be maintained within the anterior chamber until the termination of the operation.

To fulfil all these objects, this, the first part of the operation, may be performed as follows. The patient lies on a couch with his face towards the window, the pupil of the eye to be operated on having been previously thoroughly dilated with atropine. The surgeon stands behind and at the head of the patient. The needle to be used should be a fine one, with a short spear-shaped point, to allow of an easy entrance. The shaft should be perfectly cylindrical, slightly conical—that is to say, slightly thicker two or three lines from the point than at the point itself—and highly polished. Tried upon the drum, it should perforate without sticking, and, on attempting to withdraw it, should raise the leather-work with it. In short, it should fill the aperture in the cornea which it makes so completely, that no aqueous humour can escape, until its withdrawal from the eye at the finish of the operation.

The lids being kept apart by a spring-speculum, the needle is made to perforate the cornea obliquely one or one-and-a-half lines within its margin, so that during its movements it may not in any way injure the iris.

Mr. Bowman is very urgent on the advisability of penetrating the cornea well within its margin, and of the great importance of maintaining the iris untouched during the operation. The distance within the cornea at which the needle should enter will depend partly on the extent of the dilatation of the pupil; as, if not widely dilated, the needle should be made to penetrate nearer the centre. Different operators follow different plans of breaking up the anterior layer of the capsule of the lens. The object to be attained, is to tear up the anterior two-thirds of the lens capsule, without inflicting any injury on its posterior layer; to destroy, in fact, that portion of it which occupies the pupillary space, even when the pupil is slightly dilated.

One method is, having introduced the needle, by a series of movements of the point of the instrument from the circumference towards the centre of the lens, to destroy the anterior layer of the capsule within the pupillary space, and then by a semi-rotatory or stirring motion to break up the lenticular



matter, and urge it, as it were, forwards into the anterior chamber.

Another mode of proceeding is to act first on the central portion of the anterior layer of the capsule, and to proceed gradually towards its circumference.

A third method is merely to prick the capsule very freely, first by a series of punctures around the circumferential border, and then to make two or three in the central part, so as to allow the aqueous humour to well in and act upon the lens-matter.

The first action of the aqueous humour on lenticular matter is to render all which is transparent, opaque; and, in so doing, to cause it to swell and occupy more space; then it acts as a solvent, gradually melting it down prior to its absorption.

After the operation is completed, the needle is withdrawn, and the pupil is to be kept widely dilated with atropine; the patient should be in a darkened room, but not in bed; and a solution of atropine, of the strength of a grain to an ounce of water, should be dropped into the eye twice a day.

[To be continued.]

## Transactions of Branches.

### BENGAL BRANCH.

#### PRESIDENT'S ADDRESS.

By EDWARD GOODEVE, M.B.

[Delivered at the First Annual Meeting, Feb. 2, 1864.]

GENTLEMEN,—It was my intention to have occupied the chair to which you have called me, without saying more than my thanks for the honour which you have done me; but some of my native friends have expressed a wish that I should address a few words to you—a sort of confession of my faith as regards the Society. I beg, therefore, to make a few observations to my old friends and pupils.

In the first place, I have to thank you for the honour which you have done me in electing me to the presidency of your Association for the ensuing year. The gratification which I feel, however, is tempered by the fear that want of health and leisure and want of acquaintance with public business of this sort, will cause me to be but a poor substitute for my able predecessor in this chair. I regret that I have been so little able to attend our past monthly meetings. My absence, I assure you, must be attributed to anything else but indifference towards the Association and its objects. The Society has, indeed, my most cordial wishes for its continuance and prosperity. I have been rejoiced to see the formation of this Association; because I think that the time has certainly come when the European and native representatives of Western medicine should combine together for the cultivation of professional subjects. It has been resolved that this Society should become a Branch of the British Medical Association. This resolution has, I know, caused some discussion and difference of opinion; but as the majority of our associates have so willed it, I hope that many of our members who still hold aloof from enrolling themselves as members of the British Society, will encourage me in the step that I have taken, and add their names to the English list; and, also, that many of our brethren who have not joined the institution, either as members or associates, will give us the advantage of their co-operation.

I said just now that I heard with pleasure, during my absence from Calcutta, of the formation of this Society, under the energetic advocacy of its founder,

Dr. Chuckerbutty. I have since willingly joined it, because I look upon this Association as a fitting sequence to the establishment of the Medical College itself, and as an evidence of the great step that has been made in India since the opening of the dissecting-room of the College in January 1836, when my old friend, Modosuddun Gooptoo, whose portrait now adorns this hall, made the first irrevocable step which committed the modern Hindoo to the practice of dissection, and, by this act, led the way to link together the Eastern and Western nations in the pursuit of the same medical science.

I feel certain that the institution of such an Association as this must be a gratifying circumstance to those first pioneers of English education in this country, by whose energetic representations the mode of teaching medicine in India was changed from that of the system of the old School of Medicine in Calcutta to that of the new one. To such, the growth of an Association such as this, the effort of the manhood of the pupils of older days, must be a source of legitimate gratification, also to those of the original teachers of the College who still survive. By those teachers who first embarked in what was then thought to be a frail ship, bound on a doubtful voyage, on a sea of prejudice and superstition, the formation of this Society must be hailed with the greatest satisfaction, as a proof that their labours have not been unavailing.

But it is not merely as proof of success of the efforts of past days that we must look upon this Society; but we must chiefly consider the advantages which it may give to us in the present time.

The cultivators of all branches of science find a necessity for union in the different objects of their study; hence, in all parts of the world, and for all branches of learning, there spring up societies, academies, and institutions. Medicine, not less than these, demands the same means and the same methods; and, perhaps, there are peculiar circumstances connected with medicine which call strongly for this union. Medicine, now as ever, is assailed by all sorts of scepticism, and opposed by all sorts of rivalry, contending for superiority in the cure of disease. Many of these rivalries spring from pure imposture; many from the overstrained use of some fragment of therapeutic knowledge; means which may be useful in some particular state being applied in an universal manner.

We are too often judged of in the world by persons who have no knowledge whatever which may serve them as a basis from which to judge us. We see daily that men gravely commit themselves, and those nearest and dearest to them, to those of whose worth they absolutely know nothing, and whose pretensions they cannot measure. To have our art assailed in this way is, indeed, depressing and painful; and it requires all our confidence in its resources to enable us to bear up against the reproach which is thus made to us.

The antidote to all this, as far as our own feelings are concerned, is in the thorough instruction of ourselves. We may be assured that, the more versed we are in our own study, the better prepared we shall be to meet the attacks to which we are exposed, and the more satisfied we shall be of the value of our own calling. If we knew no better, we might feel sorrow when we are told that all medicine is empiricism, and that our art has no better claim for consideration than any other scheme which asserts its own merits. We might, indeed, feel humiliated if we were ill informed of the mode in which medicine is really studied; if we were ignorant of the force of intellect which is at work on the great questions of physiology and medicine. To few questions have greater minds

given their lives and thoughts. The powers thus employed are not subject to the reproach of being cramped or limited to a single groove. Wherever truth can be disentangled or pursued, it has been and is being unravelled. Any one who, even at a humble distance, has followed the progress of rational medicine during the present generation, cannot but admit the force, the energy, and the untrammelled thought, with which it has been pursued by men of the highest order of mind, and with the most disinterested objects. Surely, if this be the case, there is at once comfort in that which buoys us triumphantly upwards, when we hear that the fervent labours of the scores of men who might be named, both in past and present days, are weighed in the scale against the vain pretensions of a Morison, or a Hahnemann, or a Priesnitz, and others. And, even if the unreflecting multitude condemn us, we can take comfort when we reflect that the verdict is one which ignorance gives when it judges between Ignorance and Truth.

It is in the promotion of the diffusion of this desirable thorough knowledge that these societies lend assistance; not, indeed, acting as medical bodies militant, but as instructive bodies—because I think we shall, indeed, all find improvement in them. The interchange of ideas, the discussion and conversations which ensue, are all of use in keeping us readily alive to our situation, and to keep us to our studies. Men who would remain dormant after they have passed through their studies, or learn only such mere trifles as are sufficient to keep them fit for practice, would find their minds sharpened, their enthusiasm kindled, their energy renewed, their application restored, by attendance on the meetings of professional Associations.

As the iron and the flint may remain quiescent and useless in the mine, but when struck together give forth sparks which may kindle a wide-spreading light, so may attrition of men's minds in these matters kindle much enthusiasm, improve the reasoning power, strengthen the power of debate, and lead more and more to inquiry and improvement. Professional improvement then, and all its advantages, spring from these unions, and should urge us to join them.

But it is not for the intellectual advantages alone that I think that these associations are of use. We may fairly consider that all the men who join us by so doing pledge themselves to a code of professional honour and bearing. The medical man worthy of the name must not be merely an intellectual machine—he must be guided by higher rules than those which knowledge or self-interest will give him. By entering the profession at all, indeed, he takes upon himself vows of charity to all men. By entering into our brotherhood or society, he formally renews the obligation. He reconsiders his promises of friendly bearing towards his brethren; he renews his vows of seeking no self-advantage at the expense of another; he maintains his determination not by his own representations to prosper by another's loss. Indeed, we may fairly hope that one of the great advantages of the establishment of this Society, beyond those of mere intellectual benefit, will be in setting up a standard of high professional feeling, and in the development amongst us of the great precept, which indeed includes all that I could say if I spoke ever so lengthily, "Do unto others as you would be done unto."

I trust that, both in promoting our own professional zeal and improvement, and in binding us down to high standards of professional honour and bearing, our present society will be completely successful. But I would ask, if, situated as we are here, we should be content with this? Cannot this Society be

a means through which something may be added to the general stock of medical knowledge? I hope that, if individual members do not undertake investigations and collections of facts, sections of the Society will be established for undertaking researches. There are many diseases, many points of physiology, many points of social hygiene, that the members of this Society are well situated for working out. I merely mention the subjects of the dietaries of the races of the various districts; as well as leprosy, elephantiasis, the epidemic fevers, the various manifestations of malaria, and numerous other subjects, upon which it would be tedious to enter, but which might receive illustrations from your hands, and which you are better placed for investigating than most people.

There is another matter which I hope will also be attempted one of these days; and that is, the formation of a good medical library. On its value and importance I need not dwell. We may begin in a small way at first, but let us soon begin it; and, as we hope for permanence of the Association, let us look forward to the time when it may have a collection of books worthy of the profession which it represents and of the capital of India.

And, looking down the vista of years, I hope to see the Society possess not only a library, but a habitation of its own. Surely it is not too much to hope that, in future years, some hall of science shall be reared in Calcutta, in which, as an important section of human knowledge, this Society shall find a home, in common with many others, and in which, permanently placed and working much good, it shall prove that our present aspirations have been earnest, and that they have prompted us to real work. In future, this Society will, I trust, raise a reputation for itself by the judicious use of the materials at its command, and by perseverance and industry render this Branch of the British Medical Association celebrated in the land of the parent Society.

I hope that you will not think that I have imagined a future too ambitious for you. Surely there is nothing beyond our reach in what I have sketched out. I feel confident that it is in our power to realise it.

#### A CASE OF HEPATIC ABSCESS.

By MOHENDRO LOLL SIRCAR, M.D.

[Read March 8th, 1864.]

THE patient, M. C. G., was about 26 years old. He was under my treatment from October 28th to November 23rd, 1863. Ere this he had had malarious intermittent fever, off and on, for about three months, for which he was not under regular treatment. He had some tenderness and some trifling enlargement of the liver. A few days before he first came under my treatment, his wife had died of puerperal fever. I was informed that he used to drink pretty freely after his wife's death, to drown sorrow. In consequence of this, he soon got relapse of the fever, with considerable enlargement and acute tenderness of the liver. The very acuteness of the pain, supervening upon a chronically enlarged liver, made me suspicious of the case; and the patient was at once put on a course of tonic doses of quinine and generous diet. Though the fever abated to a considerable extent, the liver continued to enlarge, and the tenderness became greater day by day, till, at the end of a week, bulging made its appearance at the right hypochondrium, with obscure fluctuation. The tumour became more and more prominent, and bulging was also observed in the right lumbar region below the false ribs. In a day or two, fluctuation became more distinct in the prominence at the right hypochon-



drium, and was now obscurely felt also in the prominence behind. The stethoscope revealed friction-sound between the abdominal parietes and the convex surface of the liver, during the abdominal respiratory movements. These movements were not, however, in the least interfered with; they continued perfectly free; so that it was quite evident that adhesion of the opposed surfaces had not taken place. To encourage this, I applied a light poultice over the tumour; and, to my astonishment, I found the prominence considerably less the following morning. The patient was gradually becoming weaker and weaker. He lost all appetite. His stools became numerous, but contained nothing but blood-tinged mucus; occasionally they were thin, feculent, yellowish, but very fetid. There never was observed any pus in the stools, from the beginning to the termination of the case.

Dr. Goodeve was called in consultation on the morning of November 13th. Arrangements were made for us to meet on the following morning, to open the abscess. When, however, Dr. Goodeve was gone, the patient's mother and other relatives objected to operation. In the course of the night, pain became general in the whole abdomen, and was excruciating in character; there was likewise considerable tympanitis—all pointing to general peritonitis, resulting from the bursting of the abscess into the peritoneal sac. Dr. Goodeve called in the morning, as appointed; but, of course, we had to abandon all idea of opening the abscess. If I remember aright, Dr. Goodeve remarked that an earlier opening of the abscess would not have been injurious, to say the least. A day or two after this, pus appeared in the urine, and was occasionally seen in that fluid for two days only, when it disappeared altogether.

A week after the supervention of general peritonitis, the abscess, or perhaps a second, burst into the stomach; the patient vomiting a large quantity of pus and blood. He survived only two days, and died on the morning of November 23rd, 1863.

REMARKS. The chief points of interest in this case were, that while the contents of the abscess escaped first into the peritoneum, then into the pelvis of the right kidney, and last of all into the stomach, it did not burst either into the large or the small intestines; and that the adhesions, if there were any, between the liver and the abdominal parietes, were very imperfect. Again, it seems to be a general opinion that a malariously enlarged liver never suppurates; whereas this case shows that a liver enlarged under the undoubted influence of malaria may, under peculiar circumstances, run on to suppuration. The patient sank so rapidly, more from inanition, as he had lost all appetite from the very beginning.

I have brought forward this case, however, only to invite discussion on the question of opening hepatic abscess externally. Are we justified in opening the abscess when we are satisfied, as any one could have been in this case, that there has been either no adhesion, or very slight, if any? In a patient reduced to the very lowest ebb of vitality from the first appearance of the hepatic prominence, are we justified in having recourse to one or other of the methods for encouraging adhesion—as, for instance, by the potassa fusa, or by laying open the abdominal wall down to the peritoneum? Are we to trust to Nature, as recommended by Budd? or are we to consider delay as dangerous, and, without waiting for discoloration of the skin, even for oedematous infiltration, nay, not even for fluctuation, are we to proceed to operate at once, as recommended by Frerichs? The fear of entrance of air into the sac of the abscess during the operation is out of the question, now that we can use the improved trochar and cannula, by which such an

untoward event can certainly be avoided. But can we prevent the entrance of air afterwards? I saw a case some time ago, in which the abscess was opened externally, and in which it had subsequently burst into the stomach; and in which, despite all our plasters, which were constantly washed off by the profuse discharges, air was regularly sucked into the stomach at each act of inspiration, and expelled thence through the œsophagus at each act of expiration. In cases of extreme debility, there is such a tendency to gangrene and rapid extension all around, that perhaps it would not be dangerous delay to pause and wait before we plunge in either the trochar or the bistoury, especially when we are satisfied that adhesions have not taken place.

## British Medical Journal.

SATURDAY, JULY 9TH, 1864.

### POOR-LAW MEDICAL RELIEF.

THE Committee on Poor-law Relief have issued a Report; and we fear from this that medical Poor-law officers must no longer look to Parliament for relief.

The Report gives a sketch of the different inquiries which have been made by the House of Commons on the subject of medical relief. It states that there has been a progressive increase of the remuneration of the medical officers; and that their *status* has also been improved.

"In 1840 there were 2,376 medical officers, whilst in 1861 there were 3,479. Unions during that period had increased 5 per cent., whereas medical officers had increased 46 per cent.

"Again, the money expended for medical relief has been constantly increasing, either as direct remuneration to the medical officers, or for purposes which either immediately diminished their duties, or afforded increased facilities for performing them. In 1838, the expenditure was £136,775; in 1848, it was £197,954; and in 1861, £238,233. In 1840, vaccination fees arose. These fees range up to £40,000, and even to £50,000, a year; and a large portion of them are paid to the union medical officers. In 1842, additional payments—namely, fees for surgical and other services—were first directed to be made to the medical officers. In 1847, those fees were increased in number, and they now approach £40,000 a year. Lately a new class of payments has sprung up—namely, fees for visiting lunatics—amounting to a considerable sum. Further remuneration is made to the medical officers by special gratuities for extraordinary services rendered during outbreaks of fever, etc., or in consideration of lengthened attendance upon particular cases of accident, or upon protracted illness. The cost of medical relief has steadily increased from 1834 to the present time. The increase in 1851, as compared with 1841, was 36 per cent. The increase in 1861, as compared with 1851, was 13 per cent.; whereas the number of unions has not been added to in anything like a corresponding degree."

The Committee does not approve of many of the changes advocated by Mr. Griffin; and mainly, it would seem, on the ground of expense.

"The Committee, moreover, do not find that any practical difficulty is experienced in securing the

services of competent medical practitioners as union officers; and, looking to the large number of medical officers now employed, the progressive diminution in extent of districts, the care taken to ensure the engagement only of properly qualified medical men, their augmented remuneration, and their improved *status*, they believe that the system has been greatly improved, and that the poor were never so promptly attended to, or so effectually relieved during sickness, as they are at the present time."

The Committee conclude with the following resolution.

"That there are no sufficient grounds for materially interfering with the present system of medical relief, which was made the subject of special and lengthened inquiries by Select Committees of this House in the years 1844 and 1854. The recommendations of those Committees were for the most part carried out by the orders of the Poor-law Board; and the system of medical relief appears to be administered with general advantage. Your Committee, however, recommend that in future cod-liver oil, quinine, and other expensive medicines, shall be provided at the expense of the Guardians, subject to the Orders and Regulations of the Poor-law Board."

Mr. Griffin has answered the above statements of the Committee; and most assuredly his explanations show a very different condition of things. The Committee, he says, have been grossly misled by Mr. Cane's Report.

"The return made to Parliament in 1857 shows that although there were 3307 medical officers' names, there were but 3037 individuals, as 251 medical officers held appointments in two unions and nineteen in three unions; and there were in December 1862, nominally 3362 medical officers, but in reality only 3073 officers, as 273 held office in two unions, and 16 in three unions; so, in fact, the actual increase of officers between the years 1857 and 1861, a year later than that named by Mr. Cane, is only 36, or an increase of 7 annually, and not 41, as Mr. Cane's figures would lead you to believe; and when the additional number of acres added to the unions in that period (in 1854 there were 34,320,161 acres, and in 1861 37,248,026 acres), and the great increase in the population is considered (in 1854 the population of the unions, parishes, and incorporations, was 17,802,662, and in 1861 19,941,221), it clearly proves that the increase in the number of medical officers has not kept pace with the increase in the size and population of the unions.

With regard to the stated increase of the money expended for the medical relief of the poor. Mr. Griffin says:

"If we compare these figures with the population at the different periods named, we find that in 1838, it was 15,155,000, or 2*d*.2 per head. In 1848, the population was 17,304,000, or 2*d*.7 per head. In 1861, the population was 20,062,000, or 2*d*.8 per head, which shows that the only increase between the years 1838 and 1848 was six-tenths of a penny per head, and between 1848 and 1861 but one-tenth of a penny per head on the population. The number of acres contained in the unions, etc., at the dates specified by Mr. Cane, I am unable to give; but it will be sufficient to show that in 1842 there were but 33,689,808 acres, whilst in 1862 there were 37,284,026. Now, in 1842, the medical relief cost £153,481, or 1*d*.1 per acre; in 1861, it cost £238,233, or 1*d*.2 per acre. These figures prove that medical expenditure,

as far as the salaries of the medical officers of most unions are concerned, have not increased at all."

The "additional payments" of which the Report speaks are scarcely worth mentioning, and, besides, are included in the sum of the general expenditure.

As for the vaccination fees, Mr. Griffin says truly enough, that the medical officers have had a vast amount of extra work to do through vaccination, and may reasonably enough expect to be paid extra.

The fees for visiting lunatics are at the rate of 2*s*. 6*d*. a visit: And surely this is no great extra payment, when it is recollected that the surgeon is under a penalty of £20 if he fail to make his quarterly report to the Lunacy Commissioners.

In the same way does Mr. Griffin answer all the positions unfairly assumed by the Report: and we only regret that our crowded columns prevent us publishing in full his reply.

From all this it appears that our Poor-law medical brethren only look in vain to Parliament for any hopes of obtaining a due remuneration for their services. If they do not help themselves, help will not come to them. Again and again have we shown in these pages how completely the profession has in its own hands its destiny. How can Parliament help a profession which will not help itself? We put it to the common sense of our brethren if it is not hopeless to call upon Government, for example, to increase the official salaries of Poor-law officers, so long as medical men will outbid, or rather underbid, each other for these appointments. It seems to us hoping beyond hope to expect that a free-trade House of Commons will ever force ratepayers to pay more for the services of an official than the official himself demands for his services.

If our brethren throughout the country could only see this matter in its true light, and would hang together, combine together, in defence of their rights, we should soon find that the medical labourer would receive a due reward for his services. What a grand thing it would be if the whole profession could be brought into a state of active unity!

In the meantime, alas! little remains for us but to hope and to deplore; to deplore the hard lines which force professional men to labour for such wretched pay, and to hope that the evil may at length become so great as to effect its own cure.

For a sixteen ounce mixture, a London druggist will often charge some three to five shillings; and for four shillings Doctors of Medicine and other practitioners undertake to visit and treat and physic a pauper at his own house, miles away, it may be, from the doctor's residence; and for a quarter of a year! Yes; the London druggist charges as much for one pint of physic as the doctor charges for attending and supplying medicines to a patient during thirteen weeks! The doctor places himself at the service of the pauper, and finds him physic,



etc., during thirteen weeks, for four shillings! What remedy can any Parliament administer to such a deplorable state of things as this?

Our attention has been recently recalled to these things by a dispute which has for some time past been going on between a body of guardians and their medical officers. The adjustment arrived at between the disputants is a tariff at the rate here mentioned. Four M.D.'s, we understand, amongst others, have undertaken the duties at this rate of payment. They engage themselves to attend labours, to perform capital operations, reduce dislocations, put up and take charge of fractures, at the rate of four shillings per case!

On a previous occasion we put this question on other grounds than those of the interests of medical men. We asked the profession if it be possible to do justice to the patient on such terms. We ask the profession if it be possible to perform the duties of Poor-law medical officer at a positive loss. And is it not evident that whoever attends sick people, confines women, performs operations, at four shillings per head, must do the work at a loss? Can the profession believe that the pauper can be supplied with proper medicines and duly attended to on such terms as these? We know well enough that there is no profession which, as individuals, makes more sacrifices than our profession does—which does so much benevolence; but we must still ask the question: Ought men, in conscience sake, to undertake work of the kind on such terms? In other words, do the paupers, who are attended on such terms, really receive the attention which they require and ought to have? It is useless for us to tell the guardians that the poor cannot be properly attended to on such terms. Their answer is: Why then do you undertake the work? Really we address this question to the conscience of those of our professional brethren who labour for this wretched payment. Why not attempt one great united movement? Success would as certainly follow thereon, as it will follow in the case of the army medical officer. If candidates presented themselves in abundance at the Army Medical Board, what chance would there be of any improvement of the Army Medical Service?

#### THE CHLOROFORM REPORT OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

ON Tuesday last, the Report of the Committee appointed by the Royal Medical and Chirurgical Society about two years ago, to inquire into various points relating to the uses and administration of chloroform, was presented to the Society. The Report was a voluminous document, and was supplemented by a still more voluminous series of appendices, containing the histories of experiments, tables of cases, etc.

On account of the length of the Report, portions only were read; but it was announced by the President that it would be on the library table during a fortnight for the inspection of members.

The Committee had arranged themselves into three sections, undertaking respectively the physiological, the surgical, and the obstetrical departments of the inquiry. The physiological section, it was explained by the chairman, Mr. Curling, had especially devoted much time and labour to the subject; and, altogether, seventy meetings of the various sections had been held. The Committee had also received much valuable assistance from other members of the Society, and from members of the profession not connected with the Society.

Among the topics embraced in the Report were the following: How chloroform destroys animal life; Effects of chloroform on the heart's action, and on the respiration; Effects of division of the pneumogastric nerve; Effects of chloroform on the glottis and fauces; Effects of ether; *Post mortem* examination of animals destroyed by chloroform; Resuscitation in apparent death from chloroform; Rules to be observed in cases of threatened death from chloroform; Uses of chloroform in surgery, and in obstetric practice and the diseases of women and children; etc.

In investigating the manner in which chloroform destroys life, the Committee had made a number of experiments, chiefly on dogs. Mr. Clover's apparatus was used for the administration of air impregnated with from 1 to 14 per cent. of chloroform; and, for mixtures of air and chloroform containing 40 per cent. or more of the latter agent, an apparatus was employed which allowed heat to be applied. The duration of animal life was found to be in an inverse ratio to the strength of the chloroform. A mixture containing from 1 to 2 per cent. was generally safe. When the strongest doses of chloroform were given, the pulse and respiration ceased almost simultaneously; while the action of the heart continued somewhat longer. When the chloroform was inhaled in full doses through an aperture in the glottis, death was more rapidly induced, and the heart's action ceased before the pulse; while the results of the administration of small or moderate quantities in this way differed little from those obtained by ordinary inhalation.

Observations with the hæmodynamometer shewed that the administration of chloroform was first attended with an increase of the heart's action, which was observed even when there was but slight struggling on the part of the animal. This increased action, however, seldom continued above a fraction of a minute; after this, there was a gradual diminution, which, however, was liable to interruptions. The arrests in the fall of the heart's action appeared to correspond with the periods when respiration was lowered, and were therefore believed to be connected

with a diminution in the quantity of the poison imbibed: they were also modified by the introduction and withdrawal of air.

In several instances, movements of the heart were observed, after the cessation of the rhythmic action of the organ. The duration of the rhythmic action of the heart was longest in cases where the strongest doses of chloroform had been used; and this was explained by supposing that, in such instances, the cessation of movements denoting life is more rapid, while the heart is more gradually and thoroughly enfeebled by the prolonged administration of smaller quantities.

With regard to respiration, it was observed that the concentrated vapour of chloroform produced spasm of the fauces and glottis, but only for a few seconds. After this, and when moderate doses were given, the respiration was increased in quickness for a time. The inspirations were at first deep; but subsequently became more and more shallow and less frequent, until arrest took place. Recovery could be produced in from twenty to forty seconds, if the chloroform were withdrawn; and this could be repeated two or three times. The explanation of the recovery offered was, that the entrance of the chloroform into the lungs was interrupted by the arrest of respiration, while at the same time that which had already been introduced was eliminated.

The effects of ether were found to differ from those of chloroform in several respects. This agent exerted on the heart a stimulating effect, less sudden and more prolonged than that of chloroform; and, during insensibility, the pressure of the column of blood in the hæmadynamometer was maintained up to the period of death, and until respiration had ceased; while its failure under chloroform occurred at an earlier period.

The Committee had collected 122 cases in which death could be without question assigned to the inhalation of chloroform; but they believed that this did not represent the entire number of fatal cases. There were also numerous instances where life had been placed in jeopardy during the administration of chloroform.

The Committee had made observations with the object of ascertaining the best means of avoiding accidents in the use of chloroform, to the agent employed, and to the method of administering it.

A mixture containing from 2 to 4 per cent. of chloroform vapour and 96 or 98 per cent. of air might be inhaled without danger to life; and, if necessary, 4 or 5 per cent. of chloroform vapour might safely be used; but 10 per cent. was liable to produce dangerous symptoms. Ether to a certain extent fulfilled the conditions required; but the slowness of its action and its disagreeable odour were objections to its employment. In the absence of any other known anæsthetic agent capable of ful-

filling the indications required, of efficacy and prompt action combined with safety, the Committee had made experiments with certain combinations of chloroform and ether; viz., *a*, a mixture proposed several years ago by Dr. Harley, containing 3 parts of ether, 2 of chloroform, and 1 of alcohol; *b*, one containing 4 parts of ether and 1 of chloroform; *c*, a mixture of 2 parts of ether and 1 of chloroform. The mixture *b* was found to be very similar in its effects to ether; air containing 15 per cent. of it might be inhaled with safety, but its action was very slow. The mixtures *a* and *c* were very similar in action, and were in this respect intermediate between ether and chloroform. In the human subject, insensibility could be produced by them with sufficient rapidity; and in animals could be maintained thirty or forty minutes without destroying life. The action of these mixtures on the heart was less distressing than that of chloroform, the amount of insensibility induced being equal. The Committee suggested that further trial should be made of these mixtures; and they gave the preference to the mixture *a*, on account of the uniformity with which the ether and chloroform were blended with the alcohol, and also because it was probable that the alcohol acted as a stimulant and sustained the action of the heart.

The effects of chloroform, the Committee had been led to conclude, depend much more on the degree of concentration of the agent than on the mode of administering it. It would be very desirable to have some means of measuring the amount of vapour inhaled as readily as doses of medicines can be weighed; there was, however, but one apparatus which fulfilled this requirement—that of Mr. Clover; but it was not very portable, and further experiments with it were required. In the absence of any means of determining the quantity of chloroform vapour, the Committee thought the plan of administering chloroform on a handkerchief or lint least liable to objection. It should be held an inch and a half from the mouth, so as to freely admit air.

In regard to resuscitation after apparent death, the result of the inquiries of the Committee was, that artificial respiration by Dr. Silvester's method, *applied early*, was the most efficacious and easy plan. The cold douche on the face and chest was very inferior. Electro-galvanism and electro-magnetism were in many instances very effectual; but they were not to be preferred in desperate cases, and were not equal to artificial respiration. Indeed, the Committee held that artificial respiration should never be delayed in order that other means might be tried; it should be employed instantly, when alarming symptoms set in.

The Committee were of opinion, that chloroform ought never to be administered by careless or inexperienced persons. It should not be administered immediately after food, but three or four hours after-



wards; and, in cases of much depression, a little brandy might be first given to the patient. The recumbent position was preferred; in the sitting posture, there is danger of syncope. The chloroform should be given slowly, and sudden increase should be avoided as being dangerous. The person administering it should carefully watch the respiration, and keep one of his hands free, so as to be able to examine the pulse from time to time. When pallor, failure of the pulse, or other dangerous symptoms, appear, the chloroform must be withdrawn, and free access of air allowed; the tongue should be drawn forward, and the mouth and fauces cleared; the patient must be kept in the recumbent posture, and cold water should be dashed on his face, and the thorax compressed so as to favour respiration. In more severe cases, artificial respiration must be employed at once. The period within which resuscitation is possible varies from two to ten minutes.

In surgical practice, the administration of chloroform, in the opinion of the Committee, is not contra-indicated by the presence of heart-disease; but fatty degeneration of the organ required care. Chloroform may be given, with proper management, in operations on the mouth and throat. In operations on the deeper parts of the eye, it is undesirable, from the vomiting which may be induced. In hernia, it is highly valuable; and in operations about the anus it is indispensable. The examination of the results of 2586 capital operations performed before chloroform inhalation was introduced, and of 1860 operations of similar character performed subsequently, proved that the rate of mortality had not been increased since the introduction of chloroform.

In obstetric practice, the use of chloroform in natural labour is not attended with danger; no well authenticated cases of death from its use having come to the knowledge of the Committee, although sometimes unfavourable symptoms have been produced. It may, in moderate doses, protract labour; but does not always do so. It does not predispose to convulsion, nor does it interfere with lactation or with the general condition of the mother and child. In artificial labour, the inhalation of chloroform is very useful in many cases; but, as a rule, should not be employed when there has been much hæmorrhage, unless stimulants be also given. Chloroform is also useful as a means of facilitating diagnosis in diseases of women; and, both inhaled and applied as a liniment, in severe cases of dysmenorrhœa, neuralgia, etc. Chloroform inhalation was also favourably reported on as a remedy in the convulsive diseases of women and children.

The above is an outline of some of the principal parts of the report; and, on a future opportunity, we may be able to give more. The Committee have evidently laboured most diligently in the investigation of the important subject entrusted to them,

and have, from their own experiments and from the information furnished to them, put the whole matter into a shape that cannot fail to be of high practical value. As the whole Report was not read, it is impossible to say that the Committee omitted to notice any point of importance. One was, however, alluded to, in the discussion which followed, by Dr. Hyde Salter, as a question which would necessarily require some years' investigation; viz., the effect on the system of the habitual inhalation of chloroform. As far as Dr. Salter had observed, this effect was similar to chronic alcoholism. We doubt not that on this, as well as on other matters, various members of the Committee will continue their inquiries; for, as was observed by several members, the Report, while aiming at laying down rules in regard to some points, equally suggests others for further discussion.

#### THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

WHAT is the first step to be taken to advance in the direction in which we have been endeavouring to lead the Council of the College in the direction of reform? It is manifestly this. The Council meet on the 14th instant—next Thursday. On that, the very first occasion which offers, we urge upon Mr. Paget that he should at once hand in a written notice that he will, at the first meeting of the Council in October, bring under the consideration of the Council the present constitution of the Court of Examiners, with a view to its alteration. The very fact of the introduction of such a notice into the Council will be in itself the loud sound of a coming reform. It will bring prominently home into the very ears and minds of the Council, the absolute necessity for setting their house in order, and at once preparing for the work.

We will venture to say, after the facts which have been again and again so prominently detailed in these pages, and in face of the most faulty constitution of the College management which they demonstrate, that no one will venture, even in the Council Chamber, to sing the tale of optimism—to assert that things are going on there in a state of perfection—that “whatever is, is best.” The utmost that the most determined Conservatives may venture to say will be, that reform is inopportune at this moment; that it should be a gradual affair; that hasty legislation is bad; that things, when they are out of order, will right themselves in the course of time; and so forth.

But these excuses, under the bright light of the press and public opinion, will no longer avail. The system has been tried long enough; it has been weighed in the balance, and it has been found wanting.

The proclamation of such a notice as that above

referred to within the very walls of that secret chamber, will be the certain knell of existing abuses, the sure harbinger of better things to come. And once more we say, we blame no one in this matter. We blame alone the measures which have naturally (speaking in a worldly sense) made men what they are in Council. But we will add that, when reform comes, it will be to the lasting credit of the country Fellows that to Mr. Paget was due the first positive action in Council which brought about so excellent a consummation, and which relieved the College of the many grievous abuses which at present tarnish its lustre, and grievously impede its usefulness and its interests. Let this be the answer to those narrow minded men who hold that country Fellows should have no seat in the Council.

#### LEGISLATION FOR PROSTITUTION.

A BILL called, for the sake of euphony, we suppose, "Contagious Diseases Bill", has just been presented to Parliament. By its provisions, it is intended that "the spreading of certain contagious diseases, meaning venereal disease," in particular places, shall be prevented.

Now, we will venture to say that, since the days of Charles I. no such iniquitous interference with the liberty of the subject has ever been proposed in the House of Commons. Thus, for example, by the tenth clause it is proposed that any superintendent or inspector of police, "having good cause to believe that any prostitute found in any public place, for the purposes of prostitution, has a contagious—venereal—disease, may by an order direct a constable to take her into custody, and bring her before a justice." Now, what are the grounds upon which the inspector is to make his diagnosis? It is not, we suppose, meant that the inspector of police shall inspect and examine the woman. On what grounds, then, is he to form his suspicion? We suppose he is to be allowed to draw his conclusions from *rumour*—from the report that the woman has communicated the disease to Private X, or to Corporal Z. We put it to members of the profession, who know the difficulties which so often attend the tracing of this disease to its true origin, whether anything can be more outrageous than to permit an inspector of police to have a *suspicion* that such a woman has the venereal disease, and thereupon to take her into custody. Except on the grounds that these "unfortunates" are so completely outcasts as to be bereft of all their civil rights, Parliament can never sanction so shameful a violation of the liberty of the subject as that of allowing an inspector of police to take a woman into custody on *suspicion of having a venereal disease*. Ten times more reasonable and fitting and legal would it be to register all prostitutes, and force them

to submit to periodical examinations—in fact, boldly to introduce the continental system.

When the woman is thus arrested by the inspector on *suspicion of having a contagious disease*, she is to be taken before a justice of the peace, who may, if he likes, have the prostitute examined, to satisfy himself whether she be diseased or not; and still all on suspicion. And more than this: if the justice be satisfied that the woman brought before him is a prostitute—is affected with the disease—he shall order her to be sent to a hospital; and if it be proved, in addition, that she knew she was so diseased whilst plying her trade of prostitute, the justice may order her to be imprisoned for one, two, or three months!

Then, again, we find that any keeper of a house, who "knowingly induces or suffers any common prostitute having a contagious disease" to resort to his house, shall be liable to fine or imprisonment. But how is it possible to obtain proof that the prostitute or the keeper of the house knew that she was diseased?

We need say no more to show the character of this proposed Act of Parliament. It is manifestly a most bungling attempt at legislation on a most painful and difficult subject. Those who produced it are totally ignorant of the nature of the disease whose dire effects they would arrest. No medical man could have had anything to do with the framing of such clauses as these. We will venture to say that Parliament will never permit such gross injury to be done to the liberty of the subject, even for the sake of doing a great good to the army. We willingly admit that the whole subject is one of extreme difficulty; but we are fully satisfied that no scheme for arresting the evils of syphilis can be admitted in this country which conveys in it such a violation of personal liberty—which allows an inspector of police to arrest a prostitute on suspicion of her having the venereal disease.

THE election of Councillors has resulted in the return of Mr. F. Le Gros Clark, Mr. Henry Hancock, and Mr. Thomas Blizard Curling. The candidates, and their number of votes, are as follows: Mr. Clark, 147; Mr. Hancock, 139; Mr. Curling, 136; Mr. Gulliver, 106; Mr. Turner, 96; and Mr. McWhinnie, 63. About 285 Fellows voted.

THE mode of election of Fellows of the College of Physicians does not work satisfactorily. Whatever pains and honest trouble the Council take to make a good selection, they cannot please the Fellows. All parties, indeed, concerned are dissatisfied under the present *régime*. The Council, who select, naturally are angry with the Fellows, who elect, for questioning their choice. The Fellows are not unnaturally disappointed if they see, or think to see, good men



passed over in favour of juniors on the list who are not better men; and, as the Fellows have the power of electing, rightly or wrongly, they sometimes avail themselves of the privilege, and so very ungraciously ignore the care and trouble which the Council have bestowed upon their list of proposed Fellows. An unfortunate encounter of this kind has characterised the election of Fellows of the present year. The Fellows, to a certain extent, took the matter into their own hands, and would not altogether accept their Council's list. It is, however, only right to say that no objection of a personal kind was felt towards any of the gentlemen on the Council-list. The objection was merely of the kind above mentioned. The Fellows took it into their heads that some of the members on the list had been unduly passed over, and therefore resorted to the only means they had of expressing their opinion. They were obliged to do a little harm, in order, as they thought, to do a greater good. The result of this *contretemps* will, however, probably eventuate in a reform of the present mode of procedure. Every one admits it to be a bad mode, so no one need be surprised if it occasionally produces bad fruit. The Fellows have, therefore, resolved to cast about for an improved method of electing or selecting Fellows, if haply they may hit upon one. To find a better plan, however, is not an easy thing; and he who will discover a scheme which shall satisfy the several parties concerned will be entitled to great praise and much thanks. We shall regard him as a true inventive genius.

THE next army medical competitive examination comes off on August 8th. We have heard that the number of candidates coming from the Dublin School is about twenty-five, and therefore not the overwhelming number suggested.

*The Daily Telegraph* draws the following moral from the tale of the gallant young Llewellyn. How is it that non-professional men can all see these things so clearly, and that our own Army Medical Direction is so blind to their patent truth?

"There is a moral to the proud story, too, which concerns ourselves, our services, and the War-office and Admiralty. This is the breed of men we want to redeem our hospitals between decks and in the field from some of the horrors of war. At this moment war is in the air. And what have our authorities done to get good and true men of the Llewellyn stamp to follow our march, and sail upon the sea with our fleet? They have done, we reply, everything they possibly can to deter them from joining, and to make the medical department in the army odious and unpopular. There has been a stupid jealousy set on foot between 'combatant' and 'non-combatant' officers—as if the slayer were superior to the healer—which is having the effect of utterly demoralising the medical division of our services. Skilful and humane doctors have been so persistently affronted by the regulations, and students so discouraged by the action about the Warrant of 1858,

that every lad of promise turns his face from the service, and men grown grey in honourable exertions take their scanty pension and quit their uniform with disgust. 'Non-combatant officers' forsooth! as if heroism enough has not been shown in the Crimea, in India—in 'charging' cholera, and 'forming square to receive' typhus and typhoid—to spare science this ignorant and suicidal insult. But, in the future, our soldiers will have to fight with no such certainty that, wherever they fall, a brave heart and cool hand will bandage their hurt under fire, and snatch them from death. We are carefully taking measures to keep men like Llewellyn out of our own ranks, and drive them to Confederate cruisers, foreign service—anything and everything sooner than the regiments and ships where they are officially snubbed. Appointments once honourably striven for are now going begging; and, for the army's sake in these times of peril, we take a moral from the brave young doctor's death, to point out the ignorant and indifferent set with which the Horse Guards are doing their best, or worst, to recruit our departments."

THE term "acting assistant-surgeon", as applied to the army, seems to have been borrowed from America. There also is illustrated, it appears, the well known saying, that if you want a good article you must pay a good price. *The American Medical Times* says:

"On account of the present depreciation in paper currency, the pay of our surgeons is necessarily narrowed down to quite a small figure, and the acting assistant-surgeons, who, as far as remuneration is concerned, are at the bottom of the list, necessarily suffer the most. This being the case, we can easily understand why the demand for this class of medical labourers is still urgent. Until the Government chooses to increase the pay, it cannot expect to have its wants supplied. No respectable practitioner can, for simply a hundred dollars a month, be tempted to leave his business for any length of time, even for temporary service; and the hospitals of the country will necessarily soon get filled with young irresponsible medical striplings. If the Government wishes first-class men, it must pay first-class prices."

We recommend this editorial opinion to the attention of our own Army Medical Direction.

## Association Intelligence.

### BRANCH MEETINGS TO BE HELD.

| NAME OF BRANCH.                  | PLACE OF MEETING.            | DATE.                           |
|----------------------------------|------------------------------|---------------------------------|
| METROPOL. COUNCILS.<br>[Annual.] | Crystal Palace,<br>Sydenham. | Tuesday, July 12,<br>8.30 P.M.  |
| READING.<br>[Annual.]            | George Hotel,<br>Reading.    | Wednesday, July<br>20th, 1 P.M. |

### REPORT OF MEETING OF COMMITTEE OF COUNCIL:

*Held at Birmingham, on June 30th, 1864.*

PRESENT—Sir Charles Hastings, M.D. (in the Chair); Mr. Bartleet; Dr. Bryan; Mr. Cartwright; Mr. Clayton; Dr. Falconer; Dr. Richardson; Dr. Styrup; Dr. Stewart; and Mr. Watkin Williams.

The Report to be presented at the Annual Meeting was approved.

The Programme for the Annual Meeting was approved.

The Laws of the Hull Branch were approved, and the Branch recognised.

The Laws of the Bengal Branch were approved, and the Branch recognised.

T. WATKIN WILLIAMS, *Gen. Sec.*

13, Newhall Street, Birmingham, July 1st, 1864.

### MIDLAND BRANCH: ANNUAL MEETING.

The thirteenth annual meeting of the Midland Branch was held at the Exchange Rooms, Nottingham, on Thursday, June 23rd, at 2.30 P.M.; W. H. RANSOM, M.D., President, in the chair. The following members of the Branch were also present: Drs. Goode (Derby); C. H. Marriott (Leicester); Marsh (Nottingham); Morris (Spalding); Ogle (Derby); Robertson (Nottingham); C. Taylor (Nottingham); and Messrs. J. W. Baker (Derby); S. H. Evans (Derby); S. W. Fearn (Derby); Johnson (Bassingham); J. Marriott (Kibworth); Paget (Leicester); Stanger, F. Stevenson, H. Taylor, Joseph Thompson, and White (Nottingham); and the following gentlemen as visitors: Drs. Brookhouse, Howitt, Tatham, Watchorn, Wilson, and Messrs. Morley, J. H. Osborne, E. Smith, T. A. Stephenson, Varley, and Waters.

The *Next Annual Meeting* was appointed to take place at Leicester; and the members of the Branch resident in Leicestershire were requested to nominate a gentleman to act as President for 1865.

*Report of Council.* Dr. Goode presented a report from the local Council relative to the progress of the Branch during the past year.

*Representatives in the General Council.* The following members of General Council were elected; viz., for Derbyshire, J. Heygate, M.D., F.R.S., J. Hitchman, M.D.; for Leicestershire, J. Marriott, Esq., T. Paget, Esq.; for Lincolnshire, E. Morris, M.D., T. Simpson, Esq.; for Nottinghamshire, G. E. Stanger, Esq.

*Secretaries.* The following gentlemen were re-elected Secretaries of the Branch: Derbyshire, A. H. Dolman, Esq.; Leicestershire, John Sloane, M.D.; Lincolnshire, G. Mitchinson, L.K. and Q.C.P.; Nottinghamshire, Joseph White, Esq.

*Communications.* The following papers, etc., were communicated.

1. The President, instead of the usual address, read a very interesting paper on Diphtheria.

2. Case of Excision and Disarticulation of the Lower Jaw. By S. W. Fearn, Esq.

3. Case of Ovariectomy. By C. H. Marriott, M.D.

4. Case of Removal of Polypoid Growths from the Larynx. By T. Wright, Esq.

5. Dr. Morris of Spalding exhibited numerous specimens of Trichinae, free (alive) and encapsuled; giving a history of these parasites, and making some interesting and valuable remarks on the subject of Trichiniasis, the result of some elaborate experiments recently made by him.

The following communications, which had been announced, were unable to be brought before the meeting for want of time:

1. Case of Multiple Aneurism. By G. E. Stanger, Esq.

2. The recently improved Methods of Extracting in cases of Cataract. By C. Taylor, M.D.

*Dinner.* At half-past five o'clock, the members of the Association and friends dined together at the George Hotel, when about thirty-three gentlemen were present. The chair was occupied by Dr. Ransom, the President of the Branch; the vice-chair by G. E. Stanger, Esq.

### BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

*President*—JOHN A. SYMONDS, M.D., F.R.S.Ed., Clifton.

*President-elect*—GEORGE EDWARD PAGET, M.D., Cambridge.

*All the General Meetings of the Members will be held in the Senate House.*

WEDNESDAY, August 3rd.

12 NOON. Meeting of Committee of Council in the Arts School.

2.30 P.M. Meeting of the General Council in the Arts School.

4 P.M. First General Meeting of Members. The retiring President (Dr. Symonds) will resign his office. The new President (Dr. Paget) will deliver an Address. The Report of the Council will be presented, and other business transacted.

9 P.M. The Members of the Association are invited by the Master and Fellows of Gonville and Caius College to a *Conversazione* in the College Hall.

THURSDAY, August 4th.

8.30 A.M. The Members of the Association and their friends will breakfast together in the Guild Hall. Tickets Three Shillings each.

10 A.M. Meeting of the Members of the New Council in the Arts School.

11 A.M. Second General Meeting of Members. Papers and Cases will be read.

4 P.M. Third General Meeting of Members. The Address in Medicine will be delivered by EDWARD L. ORMEROD, M.D.

The Report of the Medical Benevolent Fund will be presented.

Cases and Papers will be read.

9 P.M. The Members of the Association are invited by the Master, Professors, and Fellows of Downing College, to a *Conversazione* in the College Hall.

This day (Thursday), by the permission of the Provost and Fellows of King's College, there will be Full Choral Service in the College Chapel at 3 P.M.

FRIDAY, August 5th.

10 A.M. Fourth General Meeting of Members. A Report will be read from the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund. Papers and Cases will be read.

4 P.M. Fifth General Meeting of Members. The Address in Surgery will be delivered by G. M. HUMPHREY, M.D., F.R.S. Papers and Cases will be read.

6.45 P.M. The Members of the Association and their Friends will dine together in the Hall of Gonville and Caius College. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice to Dr. P. W. LATHAM, Sidney Street, Cambridge.

Members are requested to enter, immediately on arrival, their names and addresses in the Reception Room at the Guild Hall, when cards will be supplied which will secure admission to all the proceedings.

A Clerk will be in attendance at the Reception Room, and will give information respecting lodgings.

The principal Hotels are the "Bull", the "Eagle", the "Red Lion", and the "University Arms".



Members who wish for information previous to the Meeting, may communicate with Dr. P. W. LATHAM, Sidney Street, Cambridge.

*Notices of Motion.* Dr. STYRAP will move the following alteration in Law xv. To insert, after the words "One Guinea annually", "provided that such sum shall be paid not later than June 30th; after which date, each Member shall pay, in default, £1:5."

Mr. WATKIN WILLIAMS will move to alter Law xv, by inserting "the 1st of December", instead of "the 25th of December."

*Papers* have been promised by Mr. Spencer Wells (London); Mr. Sydney Jones (London); Mr. Bridger (Cottenham); Mr. Sansom (London); Dr. Barker (Bedford); Mr. Solomon (Birmingham); Dr. Woakes (Luton); Dr. Richardson (London); Dr. Martyn (Clifton); Dr. Philipson (Newcastle-on-Tyne); Dr. Buchanan (Glasgow).

T. WATKIN WILLIAMS, *General Secretary*.

13, Newhall Street, Birmingham, July 1st, 1864.

### METROPOLITAN COUNTIES BRANCH: DEPUTATION TO THE SECRETARY OF STATE FOR WAR.

On Tuesday last, the 5th inst., a deputation of members of the Metropolitan Counties Branch had an interview with the Right Hon. the Earl De Grey and Ripon, Secretary of State for War, on the subject of the army medical service. The deputation, which was introduced by J. Abel Smith, Esq., M.P., consisted of Dr. Sibson, President of the Branch, and the following members: Dr. Burrows (President of the Medical Council); Mr. Skey (President of the Royal College of Surgeons); Drs. Camps, Andrew Clark, Hare, Harley, Henry, Richardson, Routh, Hyde Salter, Joseph Seaton, Stewart, and G. Webster; and Messrs. Holmes Coote, Curling, Dunn, H. Lee, Lord, W. Martin, Millar, and C. H. Moore; as well as Drs. Chowne and Sharpey, and Mr. Barwell, members of the Association.

Dr. Sibson said that the Metropolitan Counties Branch had taken up the subject of the army medical service for two reasons; first, because the medical officers of the army were precluded, by considerations of discipline, from stating their own grievances; and secondly, because the Branch contained among its members gentlemen connected with all the London hospitals and medical schools, who consequently were constantly in contact with those who might become candidates for admission into the army. Some time ago, the teachers in the schools have been accustomed to urge their pupils to enter the army; but now circumstances were altered, and they could no longer do so. The Association of which this was a Branch, had always taken much interest in all that related to the welfare of the profession. Dr. Sibson then presented the following memorial.

*To the Right Honourable the Earl De Grey and Ripon, Secretary of State for War.*

*The Memorial of the President and Members of the Metropolitan Counties Branch of the British Medical Association*

HUMBLY SHEWETH—

That the attention of your Memorialists has been drawn to the condition of the Medical Service of the Army.

That it is well known to your Memorialists, that the number of candidates for admission into the Medical Service of the Army is far from being commensurate with the number of vacancies; and that, in consequence, gentlemen engaged in civil practice

have been invited to undertake the charge of troops at home.

Your Memorialists are of opinion that the members of the medical profession have ceased to apply for admission into the Medical Department of the Army, because, owing to the successive changes in the Warrant of 1858 (which Warrant gave general satisfaction), and to the practical departure from that Warrant by the Executive, they have lost confidence in the good faith of the military authorities.

They are further of opinion, that the frequent non-enforcement of the Precedence granted by the Warrant of 1858, and the modification of that Precedence by the Warrant of 1863, disqualifying the Medical Officer from presiding at boards (although on other than purely military matters), even when he is the senior officer present, have, by lowering his status, done more than any other grievance to deter members of the medical profession from joining the service.

Your Memorialists are further of opinion—

1. That the Warrant which expresses the terms of service under which Medical men enter the Army should in future be clearly defined, so that no misapprehension may arise.

2. That no alteration should be made in such Warrant without an inquiry, which inquiry should be open to the Medical service, and should be of the same extent, and involve the same amount of consideration, as that which led to the first promulgation of the Warrant.

3. That any such alteration should be made with formality and publicity, and after an explanation to the Medical Officers of the grounds on which it has been considered necessary to alter the terms of service.

Your Memorialists are further of opinion, that the Warrant of 1858 should be the basis of future regulations for the Army Medical Department, subject to the following modifications:

1. The proper definition and enforcement of the Precedence of the Medical Officer, in accordance with his rank, at boards, mess, and committees of all kinds.

2. Increased pay of Assistant-Surgeons and Surgeons.

3. Promotion to the rank of Surgeon after, at most, ten years' full-pay service.

4. Optional retirement after twenty years' full-pay service on an adequate pension.

5. Controlling power and free agency to the Medical Officer in his own department.

6. Regular leave for the Medical Officer, and sick leave on the same footing as is granted to all other Officers.

7. Non-deduction of pay for expenses incurred in the execution of his duty.

8. The abolition of the system of confidential reports by the Surgeon on the conduct of the Assistant-Surgeon.

9. The infliction by the military authorities of all punishments ordered by them; the Medical Officer's duty on such occasions being limited to the protection of the soldier from serious injury.

Your Memorialists are further of opinion, that the systematic employment of Deputy or Acting Assistant-Surgeons without examination ought to be discontinued; since it will inevitably introduce an inferior class of Medical men into the service, and inflict great hardship on the military Medical Officer by increasing indefinitely the period of foreign service; and so still further deter medical men from entering the Army.

Finally, your Memorialists would especially insist that although, since the issue of the Warrant of

1858, an examination has very properly been instituted, the intention and effect of which have been to exclude from the Medical Service of the Army all but highly qualified candidates, the inducements to enter the service have been considerably lessened. The inevitable consequence of thus discouraging the better members of the Medical Profession from entering the Army is, that the soldier must suffer. And your Memorialists are persuaded, that the services of thoroughly competent men of high tone and character will not be obtained, until the Medical Officer is upheld by the Military authorities, and is permanently placed in that honourable position which is due to himself and to the profession to which he belongs.

Your Memorialists therefore respectfully urge your Lordship to take this Memorial into your favourable consideration, and to adopt such measures as will tend to secure at once the welfare of the soldier, and the interests of the Medical Department of Her Majesty's Army.

Signed on behalf and by the authority of the members of the Metropolitan Counties Branch,

FRANCIS SIBSON, M.D., F.R.S., *President.*

A. P. STEWART, M.D.,

ALEXANDER HENRY, M.D., *Secretaries.*

Dr. BURROWS, President of the Medical Council, cordially supported the prayer of the memorial. He had been during thirty years a teacher and physician in St. Bartholomew's Hospital, and could aver that the statements made in the memorial were correct, and that there was great dissatisfaction among the students. They were unwilling to enter the army, because they could not rely on the fulfilment of the engagements entered into. That this was the case, must be very apparent from the deficiency of applications for admission. As President of the Medical Council, he had, during the recent session of that body, heard the astounding revelations made by Dr. Parkes of the sad want of professional information on the part of those who came forward as candidates for admission: proving that many of those who applied were not fair representatives of the average class of young men entering the medical profession, but those who thought to become admitted into the army on easy terms. He thought himself justified in saying, that the memorial embodied the feelings of the teachers and pupils in the London medical schools.

Mr. SEEY, as President of the Royal College of Surgeons, expressed the deep regret of himself and his colleagues in the Council of the College at the condition of the medical officers of the army. He hoped that his Lordship would do something for its amelioration. When it was considered that medical men were eminently representatives of science, and that there were but one or two in a regiment, it seemed unfair that they should be held down. The chaplain of a regiment—performing indeed functions of the highest character—had a proper status; and he thought the surgeon ought to be also placed in an honourable position.

Lord DE GREY AND RIPON said that he was glad to have an opportunity of seeing so many members of the medical profession, and of discussing the subject with them. The memorial involved two points: 1. The renewal of the Warrant of 1858; 2. Increased pay, etc. He would ask in what respects it was considered that the Warrant of 1858 was not carried out.

Dr. STEWART: With regard to relative rank.

Lord DE GREY AND RIPON said that Clause xvii was then the portion of the Warrant referred to. In 1861, a warrant was issued, by which the surgeon ranked as junior major. This, as the deputation was probably aware, was repealed by the Warrant of

1863. He supposed that the principal objection to the latter was in regard to the part treating of the position of the army medical officer on boards, etc.

Dr. STEWART said that was the point of objection. The deputation had also been informed that the medical officer ranked as junior in mess; and there was reason for questioning whether the Warrant was carried out in its integrity. But the right of the medical officer to be president of boards was the main point. The military authorities, he was aware, had looked on the presidency of boards as a species of command, not to be held by civil officers. But the term civil was misapplied in the case of the medical officers; they were exposed to the risks of war, and were sacrificed in large numbers; they received military rewards and honours: and, in a letter addressed to his lordship and recently published, it was stated that a greater proportion of medical than of any other officers had received the Victoria Cross.

Lord DE GREY AND RIPON: The Warrant of 1858 laid down that medical officers were non-combatant; and he presumed that they did not wish to interfere with military command. He could not understand why so much importance was attached to the presidency of boards.

Dr. STEWART would remind his lordship that, if a superior class of medical men was to be induced to enter the army, proper marks of distinction and social courtesy must be extended to them.

Dr. SIBSON would put the matter in a working form. According to the present Warrant, a medical officer might appear at a board as a witness only, with a junior officer as president. At sanitary boards, the medical officer should take his place according to his rank.

Lord DE GREY AND RIPON understood, from what had been said, that the deputation did not desire that the presidency of courts-martial or of boards on purely military matters should be open to the medical officers; but that on certain boards—sanitary, for instance—the medical man should be placed according to his rank. [*Assent.*] He would give the proposal to renew the Warrant of 1858 his best consideration; but he feared he could not support some of the other doctrines laid down in the memorial. As regarded the changing of warrants, this was the prerogative of the Crown; and, while he quite agreed that it would be undesirable to make changes without reason, it was inconsistent with public discipline that changes should not be sometimes made.

Dr. SIBSON said it was not desired to interfere with the Royal prerogative; but that alteration should not be made without sufficient reason.

Lord DE GREY AND RIPON would ask whether, within the last few years, there had not been an increase in the number of good appointments elsewhere, which had drawn off medical students from entering the army; and whether, at the same time, there had not also been a diminution in the numbers of those entering the profession.

Dr. HARE said that formerly students used to enter the medical schools with the view of joining the army; but now this was not the case.

Dr. RICHARDSON said there had certainly been a very serious decrease in the number of the medical profession; since 1854, he believed, the decrease had not been less than four thousand. This was very important as regarded competition; but it did not affect the duty of the authorities to render the army attractive to medical men.

Lord DE GREY AND RIPON was quite ready to allow that it might be necessary to offer increased pecuniary advantages to medical men entering the army. But he believed that there was an organised agitation going on among the army medical officers; and the



government must set its face against anything of this kind.

Dr. SIBSON would positively assure his lordship that no pressure whatever had been exercised on the deputation by the army surgeons. The members had, indeed, gained the information which they possessed, with some trouble and difficulty.

Dr. STEWART observed that, although pay might be increased, more would be required to restore confidence.

After some further discussion and explanation of several portions of the memorial,

Lord DE GREY AND RIPON said that the return to the Warrant of 1858, and the proper establishment of the precedence of medical officers, were questions that might well be considered. On other points, he would not encourage the deputation in hoping for a change.

The deputation, having thanked his lordship, then withdrew.

## Reports of Societies.

### WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, MAY 6, 1864.

A. W. BARCLAY, M.D., President, in the Chair.

*Lupus Exedens Successfully Treated by Caustics.* By T. HOLMES, F.R.C.S. The patient, a girl aged 10 years, who was shown to the Society previously to discussion, had been, in October last, under the care of the physician at the Children's Hospital. She was then a weakly child, with hazy opacity of the cornea, deafness, and chronic irritation of the larynx. The parents of the child were ascertained to be healthy, and free from syphilitic taint. Their other children were healthy. Those that had died had died of teething or other complaints common to children. The patient could talk when quite young; but from the age of 5 years became deaf, and gradually dumb; with increase of the laryngeal irritation. In February 1863, acute laryngitis set in, which necessitated the opening of the trachea.

Soon after the operation, a foul discharge took place from the nares; and from that time the lupus commenced. When Mr. Holmes first saw her in July, the alæ of the nostrils were quite gone, and the patient quite dumb. Constitutional remedies, chiefly iodide of potassium, had not affected the lupus, but done a little good for the cornea and the larynx; change of air was, therefore, proposed; but Mr. Holmes first treated the tuberculated edges with chloride of zinc, which caused a free discharge from the part, and a healthy surface. She was then sent to Margate, when the disease began rapidly to spread; the air of the place, and the cod-liver oil she took whilst there, having no good effect. The disease had now destroyed the nose, and involved both lower eyelids. She, therefore, was brought back to town; and Mr. Holmes applied the potassa fusa well to the edges, not omitting the eyelids, and again produced a healthy surface. The disease now seems to have succumbed to the local treatment, as no further progress of the disease has occurred, and the parts are cicatrised over.

The case was of interest in that in many points it resembles lupus of syphilitic origin, but without the history of that origin; in that the constitutional remedies usually tried, arsenic, mercury, cod-liver, and change of air, failed to do good; whilst, on the other hand, the most beneficial effects followed the local treatment employed.

The case was corroborated by another, a woman, with lupus; in which case more good had followed the local treatment as above described than any previous constitutional measures.

Mr. NAYLER considered the cases brought forward by Mr. Holmes of value; inasmuch as they showed how necessary it was to have recourse to local treatment in dealing with lupus exedens; but he was not prepared to admit the utility of such powerful caustics in all stages, even of this form of lupus; still less of their application to other varieties, as the erythematous, or lupus with hypertrophy. When, for example, lupus exedens was met with in the very early stage, it might be destroyed with nitrate of silver; but, in other cases, the acid nitrate was to be preferred. Again, great benefit was often received from using a powder or paste consisting of calomel and arsenious acid, which was largely used by Mr. Startin at the Hospital for Skin Diseases. The statistics of that hospital for the years 1861, 1862, and 1863, showed a total of 170 new cases of lupus admitted under Mr. Startin's care, of which 131 belonged to the female, and 39 to the male; but the ratio between the two sexes varied considerably in the different varieties, and especially in the erythematous, which was almost peculiar to the female. The influence of age was most strikingly exhibited in the several divisions of lupus. The application of the acid nitrate was also of great use in the treatment of cicatrising lupus; but it was rarely necessary to have recourse to any such caustics in the erythematous kind, and which was treated generally by carbolic acid. As regarded constitutional treatment, cod-liver oil should not be omitted, particularly when the disease was more or less connected with struma, which was generally the case; and it should also be combined with mercury in small doses. The value of this treatment was chiefly seen in lupus exedens and in strumous lupus, as also in impetiginous lupus. Syphilitic lupus was mostly benefited by mercury, with iron or the iodide of potash; so was, sometimes, lupus exedens and lupus erythematous, which alone was sometimes relieved by arsenic.

Mr. PRESCOTT HEWETT had not seen lupus exedens in so young a child, and stated that he had not had to employ caustics; but had found great benefit to result, in most cases, from the use of cod-liver oil and steel; and that they had cicatrised under that treatment without the use of mercury. The local application had generally been zinc ointment. He mentioned the case of a boy with an excrescence on the nose having a malignant aspect, to which nitric acid had been applied, and who recovered without any course of medicine; the zinc ointment was applied, and the part kept clean.

Mr. JAMES LANE thought too many cases were attributed to syphilis as to their origin; but considered that the local treatment by caustics did good in allowing the constitutional treatment a fairer chance. He would use nitrate of silver only to stimulate the edges, and the stronger caustics to destroy the tuberculated tissue.

Mr. MILNER said he had found lupus to be very common in the Brazils, whereas struma was not so.

**BEQUESTS.** Under the will of the late Mr. F. R. Magenis of Grosvenor Place, £1,000 is to be divided in equal sums to the Royal Free Hospital, the Convalescent Institution, Walton on Thames, the Middlesex Hospital, the Dreadnought Hospital Ship, and the Royal Sea-Bathing Infirmary, Margate. The late Mr. Samuel Brooks, a wealthy banker of Manchester, has bequeathed £1,000 to the Royal Infirmary of that city.

## Correspondence.

### RENAL CALCULUS (?): TUMOUR IN RIGHT HYPOCHONDRIUM.

SIR,—I send you the following case, in the hope that some of the readers of the JOURNAL will give it their attention, and let me, the unfortunate patient, have the benefit of their diagnosis, that I may apply the appropriate treatment.

In April 1859, I was exposed to rapid alternations of heat and cold, with considerable fatigue, which produced an attack of what I thought to be lumbago, from which I had suffered when at college. The attack did not last long, but it recurred at intervals, sometimes of days, sometimes of weeks. At length I noticed that the attacks were attended with pain along the course of the ureter, and in the testicle, which was retracted; and sometimes with a diffused pain over the abdomen on that side (the right), reaching to the median line in front, and backwards and upwards to the spine and edge of the ribs. Besides being subject to rheumatism, I have always suffered from acidity of stomach, with occasional deposit of lithic acid sand in the urine; but, since these attacks began, I have never seen any deposit or unnatural appearance of the urine, though I have carefully examined it for sand, pus, blood-globules, and albumen. Its specific gravity varies from 1016 to 1020; and it is always limpid, and has only a deep straw-colour even in hot weather. Formerly I could retain it for a long time; now I cannot for more than four hours; and there is some difficulty to get rid of the last few drops, probably owing to some enlargement of the prostate.

The attacks, which are never attended with nausea, seemed at first to come on spontaneously; but after a time I could generally explain them by over-exertion some hours previously, especially long journeys on horseback, and driving over rough roads. But I can still walk a considerable distance without bringing them on. At first, they only lasted a few hours; and frequently, if I could lie down at once, only a few minutes; and this has been the case up to the last, from which I am now suffering. This I can attribute to no other cause than the general concussion produced by sharpening the ends of some tough pea-sticks (which I held under my left arm) with a blunt knife; and, as it has been the longest and most marked, an account of its course will, I think, throw most light upon the rest.

I must premise, what I have omitted to mention, that, sitting up at night, as well as horse-exercise, bringing on the attacks, I have been compelled to relinquish my practice; and I always sit on a low chair, avoiding the upright posture, except when at work in my garden.

At 6 A.M. on the 9th inst., I was cutting the pea-sticks; and between 9 and 10 P.M. I was sitting on a high chair at a friend's house, when I felt a dull pain in the right loin, soon followed by a more acute one in the right ilium, passing thence into the right testicle. Hitherto I had said nothing; but, hoping to put a stop to the attack, I now changed seats with a friend, and felt immediate relief from getting into a very low easy chair. It was, however, too late: the pain returned, first in the loin, then in the ilium and testicle, and over the right half of the abdomen, which became tense and tender, but still resonant on percussion. Feeling I could sit no longer, I borrowed a stick and walked home (about three-quarters

of a mile), going to the water-closet before I went to bed. Having taken some bitter beer lately, I hoped it might produce sleep; but I could only doze, from the pain; and, finding that some French plums I had eaten were producing heartburn, towards morning I took some carbonate of soda, and about 7 A.M. a small dose of morphine and chloroform. I now again examined my side, which was much more painful; and found, just below the point of the loose rib, a hard solid tumour, of the size of an egg, very tender to the touch, from which the pain radiated towards the median line, the whole of which space was also tender; the rectus was quite tense. Here percussion was clear, but over the tumour it was dull. During the night, I passed urine several times, each occasion being preceded by priapism. After waiting some hours in vain for relief from the morphine, I took another dose; and, fearing to apply a sinapism as usual, lest, if I were obliged to apply leeches, they would not bite, I injected seven minims of solution of morphia under the skin immediately above the tumour; and then remarked that the skin round the former perforation was white like a gnat-bite, and that the reintroduction of the syringe caused no pain whatever. I did not go to sleep as usual; but I found myself free from pain and tenderness, though the tumour had not subsided, in thirty-five minutes. I was congratulating myself on my supposed cure, and thinking of getting up for dinner, when my luncheon was brought and placed to my left side. The instant I turned in bed to eat it, I felt something turn over as it were from the seat of the tumour towards the median line; and all my pains returned, and became so severe, that in the evening I applied six leeches over the tumour; but, as the skin was infected by the morphine, they drew but little blood, and gave me no relief. I had a very bad night, though I took a strong dose of morphine and chloroform; and next morning I sent for a hot bath, in which I remained for an hour and a half in comparative comfort. Just before my bath, I was visited by an eminent medical friend, who thought me looking better than on a previous attack, which was much more violent, but which ceased, and the tumour disappeared, during his visit. After the bath, the pain again returned; and I applied a mustard plaster first to the left sacro-iliac region, to which it had now extended; then to the right; then over the right kidney; and, lastly, over the tumour. From all these parts it expelled the pain in succession; so that, when my friend called again in the evening, though the tumour remained, but decreased in volume, he thought I should be well again the next day.

I slept as well as usual that night, only awaking twice to pass urine, and only once with priapism; and after breakfast, finding no pain nor tenderness, though there was still some fullness of the right side, I took my bath, shaved, and dressed, in about three-quarters of an hour. The pain then again returned; but, instead of returning to my bed, I passed the day on the sofa.

June 11th. On awaking this morning, after a tolerable night, to my great disappointment, I found a return of the pain generally, but worst over the right sacro-iliac region; and fullness over the seat of the tumour, which, however, was no longer distinguishable. The leech-bites had, as usual with myself, produced so much irritation that I applied water-dressing to them for thirty-six hours; and now this had brought on an eczematous eruption, so that I could do nothing more than apply cotton wool over them and the tumour. A mustard plaster, however, over the sacro-iliac region, relieved the pain, though it did not remove it; and at 4 P.M. I was in comparative ease, though afraid to leave my bed, lest the pain



should return; my easiest position being to lie on my right side, with the right thigh slightly bent.

June 13th. Towards morning, I had a return of the pain in the seat of the tumour and in the right loin, for which I applied a mustard poultice, and took a little morphine. These removed the pain, except a little tenderness on pressure. I remained in bed the whole day, and on the 14th till 2 p.m.; when, all pain and tenderness having ceased, and only a little fulness remaining in the right hypochondrium, I got up again.

June 15th. I was much troubled with priapism during the night; and, after passing urine this morning, I found a quantity of lithic acid sand in the pot, being almost the first time I had seen any since the beginning of my complaint, five years ago. I have made water since without any further appearance of gravel; and now there is neither pain, tenderness, nor swelling over the abdomen.

I have been thus prolix—tedious, I fear—in this account of my case, in order that I might lay the whole of the facts before your readers, some of whom may give me the benefit of their ideas of its nature. My own is, that I have a renal calculus in the cortical portion of the right kidney; and this locality will, I think, explain the absence of any change in the urine, of any tenderness of the kidneys when pressed, except during the attacks, of any nausea, and also the long period that usually intervenes between the action of the exciting cause and the occurrence of the pain. But why should irritation of the cortical part of the kidney cause a diffused pain over the abdomen, with tension, if not spasm, of the rectus muscle, and fulness, and a tumour in the right hypochondrium—a tumour which sometimes subsides faster than it rises? I have thought the renal capsule might be affected, as its loose texture admits of a certain degree of enlargement; but the greatest size I find recorded in the *Pathological Transactions* is three inches long by half an inch thick; besides that all its diseases hitherto described are chronic ones, and attended with a cachectic condition; whereas, I am thankful to say, my health, with this exception, is excellent, as well as my spirits, though I think most medical men would draw an unfavourable prognosis from the above symptoms.

The calculus, if there be one, I must hope will, to use the expression of a friend, "go to pot" before myself. But how am I to treat this Will-o'-the-wisp of a tumour, that is here to-day, and gone to-morrow? Dear Mr. Editor, let me have your opinion, if I can trouble you so far. I am, etc., CADOVENSIS.

June, 1864.

[Our correspondent is a highly respected and well known member of the profession, and may well enlist the sympathies of his professional brethren. EDITOR.]

#### ARMY MEDICAL DEPARTMENT.

SIR,—As an army surgeon, I desire, through the medium of your JOURNAL, to offer sincere and hearty thanks to the members of the Metropolitan Branch of the Association, for the excellent resolutions agreed to at the special general meeting held on the 13th inst. Every one of the opinions expressed, and resolutions agreed to, at that meeting, were admirable; and collectively they embody all the just and reasonable grievances of the Army Medical Service. I would not wish a word to have been left unsaid, but to attempt to add thereto would be a work of supererogation. To you, sir, also, I would desire to express deep gratitude for your very able article in the JOURNAL of the 18th inst., which for truth and completeness could not be surpassed.

May your exertions, and those of the gentlemen who so kindly attended the meeting on the 13th inst., be attended with success. I am, etc.,

FORTIS EST VERITAS, M.R.C.S.L.

June 23rd, 1864.

## Medical News.

APOTHECARIES' HALL. On June 30th, the following Licentiates were admitted:—

FRY, Augustin Barber, Sleaford, Lincolnshire  
Glewcock, George, Folkingham, Lincolnshire  
Marshall, Francis John, Moulton, Northamptonshire  
Rooth, Samuel, Chesterfield

At the same Court, the following passed the first examination:—

King, John, King's College Hospital  
Manby, Frederic Edward, Guy's Hospital  
Oakley, John, King's College Hospital  
Stevens, George Jesse Barnabas, Guy's Hospital

#### APPOINTMENTS.

UNIVERSITY OF DURHAM. The following appointments have been made in the Newcastle-upon-Tyne College of Medicine in connection with the University of Durham.

ARNISON, W. C., M.D., to be Lecturer on Botany, with Mr. Thornhill.  
EMBLETON, D., M.D., to be Lecturer on the Practice of Medicine, with Dr. Charlton.

MURRAY, W., M.D., to be Lecturer on Physiology.

NESHAM, T. C., M.D., to be Lecturer on Practical Anatomy.

PHILLIPSON, G. H., M.D., to be Lecturer on Pathological Anatomy, with Dr. Gibb.

WATSON, John, Esq., to be Lecturer on Practical Anatomy.

ARMY. To be Acting Assistant-Surgeons:

|                       |                        |
|-----------------------|------------------------|
| BEANISH, F. P., M.D.  | HUNT, T., Esq.         |
| CAMPBELL, J. G., Esq. | KURNAN, P. K., M.D.    |
| CRAYEN, J., Esq.      | LAWRIE, J. T. B., M.D. |
| DIXON, J., Esq.       | LEE, P., Esq.          |
| GELSTON, R. P., Esq.  | TYRELL, T. P., Esq.    |
| HAGAN, R. E., Esq.    | WALLACE, R., Esq.      |
| HAYNES, W., M.D.      |                        |

ROYAL NAVY.

BAIN, A. G., Esq., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.

BROOKMAN, T. D. A., M.D., Acting Assistant-Surgeon, to the *Racer*.

GRANT, William, M.D., Acting Assistant-Surgeon, to the *Royal Adelaide*, for Plymouth Hospital.

HANNAGAN, M., Esq., Acting Assistant-Surgeon, to the *Royal Adelaide*, for Plymouth Hospital.

JONES, William, Esq., Acting Assistant-Surgeon, to the *Fawn*.

KELL, George, Esq., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.

MITCHELL, A., M.D., Acting Assistant-Surgeon, to the *Cordelia*.

WOOD, Charles B., Esq., Surgeon, to the *Orlando*.

VOLUNTEERS. (A.V.= Artillery Volunteers; R.V.= Rifle Volunteers):—

HIGGINS, Charles H., M.D., to be Surgeon 1st Cheshire Engineer Volunteers.

HOYLE, R. C., Esq., to be Honorary Assistant-Surgeon 21st Devonshire R.V.

MORTIMER, W., Esq., to be Honorary Assistant-Surgeon 19th Aberdeenshire R.V.

WATKINS, R. W., Esq., to be Hon. Assistant-Surgeon 2nd Northamptonshire R.V.

#### BIRTH.

PARSONS. On July 5th, at Frome, the wife of \*J. Parsons, Esq., of a son.

#### DEATHS.

BOWIE, William, M.D., at Bath, aged 71, on July 2.

DALTON. In New Zealand, aged 39, John D., son of William Dalton, Esq., Surgeon, Cheltenham.

FIELD. On June 25th, at Brighton, aged 35, Eliza Barrow, wife of A. G. Field, Esq., Surgeon.

HEELAN, N., Esq., Surgeon, at Wokingham, aged 29, on June 25.

SWINHOE. On July 3rd, at New Swinhoe, aged 6 weeks, 1 child, infant twin daughter of \*G. M. Swinhoe, Esq.

**THE LUNACY ACT.** The act which was passed in consequence of Townley's case has just been printed. It appears that in future, on the Home Secretary having reason to believe that a prisoner under sentence of death is insane, he may desire medical aid to inquire into the same, and on being satisfied as to the insanity, may order a removal to an asylum. On becoming sane, the prisoner may be removed to undergo the sentence originally passed, whether death or otherwise.

**TESTIMONIAL TO MR. SKEY, F.R.S.** An elegant testimonial, for which nearly £300 has been subscribed by the past and present pupils educated at St. Bartholomew's Hospital, has just been presented to Mr. Frederick Carpenter Skey, F.R.S., on his retirement after long and faithful services as surgeon to the charity, and as an expression of the high esteem which is entertained for the private worth, and for this and other public services of this accomplished surgeon, who now occupies the president's chair of the Royal College of Surgeons.

**GRATUITOUS MEDICAL SERVICES.** The City Orthopaedic Hospital held its annual dinner at the Albion Tavern lately. The chairman, Mr. J. G. Fry, in proposing "Success to the Hospital," said that not only was surgical assistance given gratuitously, but that patients were admitted without letters of recommendation. At first they had to pay their secretary, but, owing chiefly to the kindness of Dr. Pollock, that expense was now saved. A reversionary interest of £1000 had been left by Dr. Oak, a late member of the medical staff.

**THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE** will hold its eighth annual meeting in York, from the 22nd to the 29th of September, under the presidency of Lord Brougham. In each of the departments three special questions are put, and a day is to be devoted to the discussion of each; the voluntary papers being read and discussed on the remaining days. The following are the questions for department of public health:—1. What are the best means of disposing of the sewage of towns? 2. What are the causes, and what are the means for the prevention, of excessive infant mortality? 3. What is the influence on health of the overcrowding of dwelling-houses and workshops? and by what means could such overcrowding be prevented?

**THE ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE** will hold its Annual Meeting at the Royal College of Physicians of London, on the 14th inst.; Dr. Monro in the chair. Dr. D. Skae, retiring President, will deliver an address. Papers will be read by Dr. Morel, on the Present State and Future Prospects of Psychological Medicine; by Dr. Toler, on the Advantage of the Cottage Plan above all others for the Accommodation and Treatment of the Insane; by Dr. Lockhart Robertson, on Asylum Dietetics; by Dr. Toler, on the Propriety of Thinking a Knowledge of Right and Wrong any test of the Responsibility of the Insane; and by Dr. Morel, on the Gheel System of Colonisation. The annual dinner will afterwards be held at the Crystal Palace, Sydenham.

**SOUTHAMPTON MEDICAL SOCIETY.** The annual gathering of this association took place at Winchester, on the 18th ult., at the Deanery. The party was about fifty in number, and included most of the principal physicians and surgeons of the Winchester, Southampton, and Netley districts. The president was Henry Dayman, Esq., of Millbrook, the vice-chairman, Mr. Lawrence. The anniversaries of the society, as Dr. Burnett remarked, were divested of all medical and chirurgical matters. The day was always spent as a

holiday for real enjoyment, and the society confessed that this was one of the most agreeable and successful meetings the society has held since its incorporation in 1852.

**LONDON HOSPITAL.** The foundation stone of the new west wing of the London Hospital was laid on the 4th inst., by the Prince of Wales. His Royal Highness was accompanied by the Princess of Wales. The Prince of Wales said that it was a source of great gratification to him to be present at the enlargement of an institution of which his illustrious relative (the Duke of Cambridge) who was ever foremost in all works of charity, was president. The call for the new wing had been made so manifest by the increased numbers applying for admission, that he most heartily subscribed to the necessity of completing so good a work. Of course, a very large assemblage greeted the Prince, and the whole affair went off right royally.

### OPERATION DAYS AT THE HOSPITALS.

**MONDAY.....**Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.  
**TUESDAY.....**Gay's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
**WEDNESDAY....**St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
**THURSDAY.....**St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
**FRIDAY.....**Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
**SATURDAY.....**St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

### TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

**CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

**ERRATA.**—In Mr. W. Weaver Jones's letter on Blood-letting, in last week's JOURNAL, in line 7 of Case 1, for "I took two ounces of blood", read "I took twelve ounces of blood"; and in line 3 of Case IV, for "20", read "120".

**SOUTH-EASTERN BRANCH.**—In the list of the names of new members of this Branch, in last week's JOURNAL, the name of Octavius J. Kent, Esq., of Eastbourne, was accidentally omitted.

**IF MR. LE GROS CLARK** will again read our remarks, we are sure he will find that there is not the slightest grounds for his suggestion, that our animadversions in any way applied to him. Most assuredly they did not do so.

**A POINT OF PROFESSIONAL ETIQUETTE.**—We have already fully expressed our views on the question. The ethics of the profession seem perfectly clear in the matter. No medical man has a right to visit the patient of another medical man at the instance of a third party, without communicating with the medical man in attendance. If Mr. John Adams, as surgeon of a railway, visited a patient who was under the charge of Dr. Smith in Dr. Smith's absence, and without Dr. Smith's permission and knowledge, he, in our opinion, clearly committed a breach of professional etiquette. The rule is clear enough in every ordinary case; and it is simply absurd to suppose that a man has a right to transgress the usual laws of professional intercourse merely because he calls himself surgeon to a railway company. This would indeed be the introduction of "railway law" into medical practice!



# Abstract of Lectures

ON THE

## PROGRESS OF SURGERY DURING THE PRESENT CENTURY.\*

*Delivered at the Royal College of Surgeons.*

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A. Cantab.]

### LECTURE III.

MR. FERGUSSON introduced the subject of his third lecture (hare-lip and fissured palate) by remarking that the operation for hare-lip was the first formal operation that he ever performed—in 1828. "Since then," he said, "I have seen many hundreds of both kinds of cases; and, being about to frame a lecture for the present occasion, the question naturally arises, Have I anything new to say?" On the first part of his subject, at any rate, we do not think that Mr. Fergusson had much to say which was new to any of his audience. That "hare-lip" differs from the lip of a hare in this, that in the deformity the cleft is always\* on one or both sides of the middle line, while in the animal's lip it is in the middle line, is a point which, besides being of little importance, has been constantly dwelt on. Mr. Fergusson, however, spent a good deal of time on this point, showing that the fact of the cicatrix after operation coming into the middle line has deceived persons into thinking that the cleft before operation was so. He then exhibited two figures of those rare cases in which a cleft extends outwards through the cheek, or downwards through the lower lip. So rare are the latter cases, that their very existence has been denied. We regret that Mr. Fergusson's drawing, as well as the copy of it in the *Lancet*, was so obscure as to be hardly intelligible. He then turned to the complicated cases of hare-lip, in which a large intermaxillary portion projects from the cleft, hanging to the end of the vomer. Mr. Fergusson explained clearly the arrangement of this projection, with respect both to the cleft and to the vomer; and, on the subject of its anatomy, made the following candid statement. "Some foreign histologists, as Von Ammon and Vrolik, have displayed great research on this subject; but I know of no more minute anatomy in the English language than that in my own work on *Surgery*." The German and French surgeons, however (and more merely "foreign histologists"), have done so much in expounding the anatomy and surgery of hare-lip, that a lecturer can hardly hope to put before his audience a complete view of the subject who quite ignores all that has been done by every one except himself. It was curious, too, to see that, after having so openly claimed a preference on account of the minuteness of his anatomy, Mr. Fergusson's anatomical description was very vague. He did not even allude to the varying number or the varying direction of the teeth which are found in the intermaxillary portion; nor, of course, to the argu-

ments derived from such variations for or against regarding this as the true "incisive bone". With respect to the surgery of such cases, Mr. Fergusson gave merely a sweeping recommendation to remove the projection in all cases. We quote the passage.

"When the fissure is double, it has been proposed to bend the projection back by pressure, or after breaking its narrow neck; but I have noticed, on trying both plans, that the mass has been an impediment to a very satisfactory operation on the lip, and whilst I do not positively object to the occasional use of either of these plans, I give a decided preference to the removal of the projection altogether. If bent backwards, it will probably be at the damage of the vomer and septum; whether bent or broken, the teeth will be thrown on a new plane, and will be likely to project backwards. I have recently heard it proposed to cut out a piece of the narrow neck, so as to let the knob fall backwards into a better place; but if this were done, I should doubt if the knob would not die for want of circulation. Of course, if the part can be preserved in its natural position, that will be best; and if there be any slight projection, that will be gradually remedied by the pressure of the lip after the operation. However wide the gaps in such cases, it is remarkable how they close as years roll on, for in many instances the opposite sides approximate so closely that a fissure will almost elude observation. I have never seen a complete osseous closure. Close approximation gives strength to this condition of the upper jaw. In early years, when there is no lateral support, the intermaxillary portion and the central incisors must be of little value as regards prehension, incision, or mastication; for the narrow neck and vomer will give but little stability in such acts. Indeed, in making such preparations as these in the infant head, it is difficult when the parts are moist to keep the projection *in situ*."

One great argument for the preservation of this projecting piece is passed over without notice by Mr. Fergusson; viz., the very disagreeable appearance of the face in profile after its removal—the lower jaw projecting beyond the upper, so as to give the extreme grade of the "under-hung" expression.

As to the causes of hare-lip, Mr. Fergusson, after rejecting the influence of the imagination, offered the following.

"If I may, or dare, venture a theory of my own, I am of opinion that the defect arises from the breed, and that it occurs where there is a predisposition in the parents. I fancy that I can detect this in the features of father or mother or of both."

Of this explanation we can only say, that it seems rather more difficult to understand than the fact which it is intended to elucidate.

Mr. Fergusson's personal experience of the operation extends, he tells us, to between three and four hundred cases. Since the invention of the hare-lip truss by Mr. Hainsby, he has always used this apparatus; the number of such cases being upwards of two hundred and fifty. Three have died, "from some child's ailment, such as thrush or diarrhoea". Convulsions have not occurred in a single instance; and, if we understand Mr. Fergusson's statement rightly, union has failed in only one case, in which it was afterwards obtained by a second operation. We are not quite certain whether this statement is meant to apply to the whole number, or only to the cases of double cleft.

As to the incision, the following was all that was said on that subject.

"After trying a variety of lines of incision, and seemingly cunning devices for adaptation of opposite surfaces, so as to give the best possible appearance to the lip, I confess that, with few exceptions, the old-

\* Perhaps not, in strictness of speech, always; for we believe that there exist preparations in which the cleft is in the middle line, one of which is in the Museum of the College of Surgeons.

fashioned straight line, from the root of the cleft to the free margin of the lip, appears to me to be the best. If a notch or irregularity is left in the lip, it arises generally, I believe, from too little having been cut away from the margins of the fissure."

No reference was made to Malgaigne's process of leaving the flaps attached to each side of the lip, in order to fill up the notch which often remains after the operation, and which several of Mr. Fergusson's sketches exhibit; or to Nélaton's operation (spoken of by him as the *procédé de Clemot*, in honour of some forgotten surgeon, who is said to have operated in this way), in which the flaps are also left attached to each other by their apex, as well as to the lip, by their bases, so that the wound has a diamond shape (). We have often seen this process used with success (and have so used it), in remedying the deformity left after a partially successful operation. The unsightly notch is replaced by a projection or knob, which gradually wears down, and is no permanent defect, while the red line of the lip is usually perfect. If these are among the "cunning devices" which Mr. Fergusson's practice has led him to regard without confidence, we are somewhat disappointed to hear it, having been inclined to form favourable anticipations from our limited experience of them. As to sutures, their material, and the best time for withdrawing them, Mr. Fergusson says nothing; which surely is an odd omission in a lecture on hare-lip. But we gather, from the way in which he speaks incidentally of "introducing the needles", that in this, as in other parts of the operation, Mr. Fergusson prefers the old-fashioned plan. In fact, while claiming the position of a "liberal conservative" in other parts of surgery, he seems to profess the most absolute torism in hare-lip.

In speaking of cleft palate, Mr. Fergusson commenced with a short history of the introduction of the operation of staphyloraphy, and of the circumstances which led him to fix his attention on the subject, amongst which one of the chief seems to have been the accident of his having, at an early period of his career, had the fortune to meet with a specimen of fissured palate in the dissecting-room, and the industry to make a careful dissection of it. The results to which this dissection led were so important that, we doubt not, the perusal of Mr. Fergusson's lecture will be an additional stimulus to the zeal of students in dissection; for it was his observation of the great strength and development of the muscular apparatus in this cleft palate, which led Mr. Fergusson in after years to conceive the happy idea of applying myotomy to the treatment of this deformity also, as Stromeyer had to club-foot, and Dieffenbach to squint. Mr. Fergusson gave full credit to Roux for his energy in introducing and practising staphyloraphy; and referred, with just pride, to his own paper in the *Mémoires Chirurgicales* for 1845, as having first correctly expounded the physiology of the muscles of the soft palate, and explained how their action often interferes with the success of the operation as practised by Roux. We cannot do better than quote the following remarks, which contain the essence of Mr. Fergusson's teaching on this matter, and clearly show the important practical bearing of his views on the success of the operation.

"The influence of the constrictor muscles of the pharynx in the process of deglutition was well known to physiologists; but how, during that process, the gap of the cleft palate was closed in vacant space was an enigma, until I had the good fortune to show that the parts are pushed together by the action of the superior constrictor particularly, so that the gap between the pharynx and the nostril is as completely closed during deglutition as if the velum were entire.

Then, for the surgical aspect of the investigation, I showed that by temporarily taking off the influence of such muscles as in common action tended to draw the two portions of the soft palate aside, there was a probability of such entire rest that union in the central line was most likely to take place—certainly, at any rate, more likely than with these muscles in full vigour, irritated, too, as they might be by the wounds, by inflammation, and by the presence of stitches. The almost intolerable distress, the depressing influence, the actual danger, associated with the injunction against swallowing laid down by Roux and others, made the early operations of this kind examples of human endurance which few could follow out to the full extent. Such injunctions had been occasionally disregarded, and Sir Philip Crampton gave some notable examples of this kind. Since I showed, anatomically and physiologically, that during deglutition the parts are actually pushed together, that process is no longer forbidden; and now a fair share of suitable nourishment is freely administered—a matter of great consequence as regards successful issue."

The success with which Mr. Fergusson has carried out his views is remarkable. Out of 134 cases in which he has operated, 129 have been successful. We should not, however, perhaps, attribute this remarkable percentage of success to the use of myotomy only; for Mr. Fergusson did not blink the fact that Mutter of Philadelphia succeeded in nineteen out of twenty-one operations before Mr. Fergusson's proposition for dividing the levator palati and palatopharyngeus had been made. Evidently, therefore, manual dexterity and delicacy in manipulating the raw edges which are to be united, have a great share in obtaining success.

With respect to operations on the hard palate, Mr. Fergusson justly attributed the priority in this operation to Dr. Mason Warren; and gave his due meed of praise to the late Mr. Avery, who was the first surgeon to practise the operation on the hard palate in this country.

Mr. Fergusson did not describe precisely his method of operation; indeed, it is too well known to require precise description. In two particulars only does he seem to have varied from his original method; viz., that he now finds the division of the palato-pharyngeus seldom necessary, and that he now generally puts the patient in the recumbent posture. Regarding the kind of incision to be used for the division of the levator palati, Mr. Fergusson said:

"My own success, if I may so call it, I attribute chiefly to the division of the levator palati, and next to the relaxation which the wound for that division involves. For mere relaxation, the incision of Dieffenbach is probably the most perfect. I know that it has been particularly successful in Mr. Skey's hands, and in Mr. Pollock's; but, with all deference, I am still disposed, from all I know of the subject, to prefer a free incision above the soft palate, whereby the levator palati may be divided to a certainty. In addition, I look upon this wound as of great service in this respect—the lymph effused upon it acts as a splint, whereby the palate is kept fixed as a board until union in the mesial line is complete."

As far as this relates to Mr. Pollock's practice, it is by no means accurate. Nothing can be less like Dieffenbach's incision than that which Mr. Pollock makes. Dieffenbach (*Operative Chirurgie*, i, 443) says that, when the cleft is large, and there is much tension on bringing the sutures together, lateral incisions are necessary, which he thus describes: "One side of the palate is perforated with the scalpel at a distance of half an inch from its lower border and



half an inch from its raw edge, and the velum is cut through with a sawing motion of the blade upwards, as far as the commencement of the bony palate. A similar incision is made on the other side." He then goes on to say that the palate after this hangs down like a damp curtain, and that "the lateral incisions appear as a pair of large oval openings, through which one or two fingers could be passed." On the other hand, Mr. Pollock's plan for the division of the levator palati consists in simply passing the knife through the tissue of the soft palate by a mere puncture, and pressing its edge against the upper surface of the velum, so as to divide the fibres of the levator (which lies above the tensor), but without in any manner interfering with the integrity of the rest of the tissue. Thus, after division of the levator palati by this method, nothing is seen on the oral surface of the velum, except a minute puncture; and the risk to nutrition, which must be involved in the sweeping incisions of Dieffenbach, is quite avoided. The plan is a simple one, and very effective, as I can personally testify; but Mr. Fergusson has apparently found such good results from his own method that he has not thought it worth while to make himself acquainted with it.

We will conclude this notice of Mr. Fergusson's lecture by extracting the passage in which he endeavoured to explain his reason for preferring the recumbent position.

"As to attitudes in this operation, the patient may sit or lie, as may best suit convenience. Latterly, I have made most use of the recumbent. I find that the head can be kept best on the same line in this position; and as regards my own views on the anatomy and physiology of the parts concerned, I deem the subject of some importance. For instance, if the patient sits with the head slightly thrown backwards, the palato-pharyngei, when irritated, pull the soft palate downwards towards the epiglottis, so as to leave a space between the palate and the base of the cranium; but if the head be thrown far backwards, the axis of action is altered, and these muscles draw the soft parts upwards, or, in other words, bring the soft palate towards the base of the cranium, and thus add to the difficulties of the surgeon by limiting the space above the soft palate where he has to work with the needles in introducing sutures. Here, as in hare-lip, the surgeon has generally stood before his patient, but I invariably select his right side in preference to all other places."

Such were the main points which struck us in what Mr. Fergusson said about hare-lip and fissured palate. The impression which was left by the lecture on the hearers' minds must, we think, have been that Mr. Fergusson's experience in these operations has been very large, and his success beyond that of most surgeons; that as far as hare-lip is concerned this success must be due entirely to operative skill, while in staphylopharynx, Mr. Fergusson is justified in claiming the introduction of myotomy into the operation, an original and very happy suggestion.

NAVAL AND MILITARY HOSPITALS. Haslar costs about £14,000, and Netley Hospital about £12,000, a year.

UNIVERSITY COLLEGE, LONDON. At a session of the Council held last Saturday, a vote of thanks was given to the Hon. Rustomjee Jamsetjee Jejeebhoy, for a donation of £1,000 to the hospital. The title of Fellow of the College was conferred on the following former students of the College, who had graduated in medicine with honours at the University of London: C. H. F. Routh, M.D.; W. Roberts, M.D.; G. Buchanan, M.D.; and T. Hillier, M.D.

## Lettsomian Lectures

ON

### MIDWIFERY AND DISEASES OF WOMEN.

Delivered before the Medical Society of London.

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

#### LECTURE III. (Continued.)

##### THE TREATMENT OF FIBROUS TUMOURS.

II. SURGICAL TREATMENT. The surgical treatment of fibrous tumours is one which requires greater consideration, and to which we must have recourse in many cases, as the tumours, if left to themselves, prove fatal. This may be of two kinds: 1. Enucleation of the tumour; 2. Removal of the tumour by Gastrotomy.

1. *Enucleation.* My labours on this point have been considerably lightened by the papers of Mr. Hutchinson, published in the *Medical Times and Gazette* for 1857, regarding which it is difficult to state to which part of the subject so graphically described by him the greatest merit is due; whether to the collection of cases, and the succinct manner in which he has detailed them, or to the practical emphatic conclusions to which he has attained. His results were founded upon thirty-nine cases, in which enucleation was practised. To these, I have added twenty-one cases. It is upon these sixty cases that my observations will be founded.

The operation for the removal *per vaginam* of fibrous tumours will be best considered under two heads: 1. Primary enucleation, where the enucleation has been completed at the time, or within a day or two; 2. Enucleation by inducing gangrene—i. e., when part has only been performed, and death of the tumour has been induced, which thus comes away with sloughing. I shall follow the same order, only I shall speak of incision of the os and tumour as a means of cure, and removal by gastrotomy, as a third division.

*Primary Enucleation.* Mr. Hutchinson enumerates eighteen cases under this head. Of these, twelve recovered, or 66.7 per cent. In nine cases out of twenty which I have added, primary enucleation was performed, and followed by recovery in all but two. The principal rules laid down by Mr. Hutchinson are: 1. The tumour must be well depressed into the pelvis by an assistant. 2. The first incisions must be very free, and pass deeply down into the tumour; thus not only completely dividing the capsule, but facilitating its bisection, should that afterwards be found requisite. 3. The opened capsule must be separated by the fingers, or, if needful, by blunt-pointed scissors, the finger being used as a director. Strong and large vulsella, with midwifery forceps, should be at hand; to be used for traction, if necessary. 4. The grand object is to draw down, after separation of the tumour, the uterus inverted with the tumour to the external parts, or as near as possible to them, which facilitates the operation. 5. After eversion has been completed, an examination should be made with the finger, also *per rectum*, etc.,

TABLE I.—Cases of Fibrous Tumour of the Uterus for which Enucleation was practised.

| No. | Operator and Locality.  | M. or S. | Age. | Previous History.   | Size, Weight, etc.  | Steps of Operation.  | Immediate effects and after progress.   | Final Result.   | Remarks.   |
|-----|---|----------|------|---|---|--|---|---|--|
| 1   | I. B. Brown. <i>Brithurcate</i> , 4th. 318. London Home, 1859.  | S.       | 35   | Sickness, pain, floodings, of seven years' duration.  | Intrauterine.   | Os first incised. Three minutes afterwards a piece gouged out.   | Suffered little. Tumour broke up. Dysmenor. wh. ceased 1860.  | Recovered completely.   | ..   |
| 2   | Ditto. <i>Ibid.</i> p. 219. Ditto, 1859.                        | M.       | 30   | Hæmorrhage, quite anæmic, tonic and styptic treatment. May 27, losing blood freely.   | Intrauterine. Fibrocystic.  | July 5th. Os first incised; no bleeding subsequently. 26th. Tumour broken down with sharp scissors.  | Tum. lessened. Offensive discharge. Sympt. of pyæmia in August.   | Dec. 10, left home recovered much. Tumour smaller.  | ..   |
| 3   | Ditto. <i>Ibid.</i> p. 320. Nov. 1859.                          | S.       | 46   | Hymen imperforate, intact.  | Intrauterine. Duration 12 years. Size of a 6 months' fetus.   | Nov. 19. Os divided, and tumour found embedded in left side of uterus as low as os internum. Capsule cut through; a piece gouged.  | Little hæmorrhage. 20th. ligors. Pyæmia.  | Died. Pus in pleura.  | Supposed due to having gouged and bkn. dn. hymen at same time. Died 29th. No P. M. |
| 4   | Dr. T. Robertson. <i>Path. Trans.</i> , xi.                     | ..       | 50   | Tumour growing five years. Began to protrude from labia, giving rise to much pain and flooding.   | Found in vagina. Os not to be felt. mass seemed to extend above it.   | Sept. 27th, 1860. A portion removed from vagina. Enclosing membrane bled freely, but not the tumour. After some days, another examination discovered os. On 17th Nov. whole mass removed by pulling. Os seemed to give way, and tumour came out. | At first favourable. As found open; smooth pieces of mucous membrane projecting as if tumour was attached there.  | Rigors, 25th and 27th.  | ..   |
| 5   | Dr. J. Hall Davis. <i>Obst. Trans.</i> , ii, 17.                | W.       | 51   | Once pregnant. Uterine hæmorrhage. Retention of urine. Cervix obliterated. Adhesions to anterior wall of uterus.  | Intrauterine. Sound penetrated 4 to 5 inches.   | Half lower portion enucleated 1st day. 2nd day whipcord applied with Gooch's cannula around separated portion. 3 days after, by much traction and manipulation, entirely removed.  | Sickness, supposed due to chloroform. No hæmorrhage. Part of tumour putrefied, but greatest part removed.         | Recovered.  | ..   |
| 6   | Dr. F. Hinkle. <i>Amer. Journ. of Sciences</i> , 1856, 52, 360. | ..       | 61   | General fever, cramps, irritable bladder, bearing down pains almost continuous. Tumour resting on sacrum.   | Sound penetrated 24 inches. Tumour in posterior wall of vagina extending to uterus.                                     | Post. wall incised. Tumour exposed. Ergot given. 5 days afterwards bistoury again used. 15th. Operat. repeated; about 2 of tumour removed. Desisted from faintness of patient. 23d. Tumour entirely removed in two parts by tenaculum.           | Bearing down pains increased. No hæmorrh. Metritis for 17 days after 1st operation, followed by diarrhœa.         | Died from enteritis.  | ..   |
| 7   | Alex. Ramsey. <i>Gaz. des Hôpitals</i> , 1859, 290.             | ..       | 27   | Primipara in labour; waters burst; placenta det. came agst. a body; semi-elastic tum. on ant. wall; punct. without result; next day from trochar op. tum. could be felt.  | Parietal.   | Trochar opening enlarged. Posterior tumour could not be detached. Next day, ergot being given, the remaining fibrous band cut with hysterotome.  | Fetid discharge for several days. Tumour came away fourteenth day with some bleeding; after this, all favourable. | Recovered.  | ..   |
| 8   | Alexis Moreau. <i>Bulletin de la Société Anat.</i> , xvi, 561.  | ..       | ..   | Reg. up to preg.; deliv. of a living child; uterus aft. deliv. still large, sup. to be another child; 9th day aft. deliv. a sac gave way internally exit of body serum up to 14th day, then great lochial flow. | 15th day Professor Moreau called in, and recognised a fibrous tumour as large as a head.                                | Enucleation performed on three-fourths of tumour. No result. Next day repetition: desisting by reason of syncope in patient. At night, tumour having descended, is extracted.  | Great relief at first, then fever returns, with faintings, etc.   | Death 3 days after operation.   | ..   |
| 9   | M. Marcet. <i>Ibid.</i> p. 116.                                 | S.       | 50   | Large abdominal tumour felt in median line. Hæmorrhage. Leucœmia. Marked anæmia.  | On examination, os open size of 5 franc piece, thro' which finger came on tumour. Tumour not adherent then. No pedicle. | M. Velpeau incised cervix on both sides; extr. tumour by pincers without much difficulty. Extr. part of inf.; vagina had to be cut to let out tumour, which was large.   | ..  | ..  | ..   |
| 10  | M. Parmentier. <i>Ibid.</i> xix, 208.                           | ..       | 51   | Symptoms of uterine engorgement called for treatment twice at intervals of 11 years; last year uterine hæmorrhage supervened.   | Tumour projecting from os, between mucous membrane and uterine walls; size 25 centimet. by 26.                          | Drawn down by forceps. Mucous membrane cut. Tumour enucleated with fingers and spatula, but owing to its large size removed in pieces.   | Cold compresses applied; slight bloody discharge for a few days.  | Recovered.  | ..   |
| 11  | M. Berap. with Amussat. <i>Ibid.</i> xvi, 52.                   | ..       | ..   | Long continued menorrhœgia.   | Tumour parietal, anterior wall.   | Transverse incision to enlarge os; also longitudinal on ant. lip. Enucleation now practised on exposed tumour, then left, and ergot given.   | Action of uterus insufficient; became weaker.   | Died of Peritonitis 3 wks. aft. op. P. M. Perit. adhesion of tumour to uterus very close. | ..   |



TABLE I—continued.

| No. | Operator and Locality.  | M or F | Age | Previous History.   | Size, Weight, etc.  | Steps of Operation.  | Immediate effects and after progress.  | Final Result.                     | Remarks. |
|-----|---|--------|-----|---|---|--|--|-----------------------------------|----------|
| 12  | Amussat. <i>Annales de Chirurgie</i> , v, 192.  | ..     | 54  | Severe menorrhagia; a fibrous tumour in anterior wall.  | Size of an ostrich egg; weighing nearly 14 oz.  | Anterior lip incised. Tumour extracted by a rotatory motion by pincers.  | ..   | Recovered.                        | ..       |
| 13  | Chaubart. <i>Ibid.</i> v, 335.  | M.     | 50  | Multipara; retention of urine 24 hours; abdomen large; catheterism impossible; uterus reached 4 inches above pubes. Cervix not to be felt.                                | Large tumour filling pelvis; had passed cervix; thus pushed up, and urine drawn 1 litre; violent labour pains; no advance wgt. found to be 2½ lb.                                     | Pulled down by pincers, and brought down to vulva; a few days afterwards excised.  | Slight bleeding checked by acidulous drinks.   | Recovered.                        | ..       |
| 14  | Langenbeck. <i>Deutsche Klinik</i> , i, 1859. <i>Quart. Rev.</i> xiv, 593.              | M.     | 35  | Two children; now in labour; severe flooding; tumour descended after 3 days' labour in vagina, mistaken for head of a child.  | Pains ceased and patient became collapsed; tumour in cervix and anterior wall.  | Entire part of exposed tumour beyond vulva incised. Under layer so cut, white fibrous mass appeared, which could be easily separated both by finger and scissors.  | Hæmorrhage slight. Dead child extracted immediately afterwards. General collapse.  | Died following night.             | ..       |
| 15  | Langenbeck. <i>Ibid.</i>  | ..     | 37  | Profuse menorrhagia; Nov. 29, very anæmic; os uteri high up, op.  | Tumour as big as an egg; post. wall and cervix; anterior wall thin.   | After eight days' attempt to expand os, tumour extirpated.   | Bleeding very slight. Two m. after normal catamenia.   | Recovered.                        | ..       |
| 16  | Ditto. <i>Ibid.</i>   | M.     | 35  | After two normal labours and one miscarriage, menorrhagia, anæmic.  | Tumour intrauterine, size of fist. Post. lip doubled in size, ext. to post. cervical wall. Ant. lip thin, through which a tumour size of egg is felt, projecting 1½ inch into rectum. | Extirpation practised. Difficult and long, tumour being nowhere distinctly bounded, and everywhere very resisting.   | Slight bleeding at first followed by suppuration from the uterus for 5 months.   | Recovered.                        | ..       |
| 17  | Kiswisch. <i>Klinik Fortsch.</i> , 34, 185. 571. <i>Deutsche Klinik</i> , Jan. 1, 1859. | ..     | ..  | ..  | Size of a hen's egg; situated in anterior wall.   | Operated two days after admission.   | ..   | Recovery 10 days after operation. | ..       |
| 18  | I. B. Brown. Communicated.  | M.     | 35  | Sterile; married 13 months; increase of pain and size last 9 months; menstruat. every 14 days; flooding; great anæmia.  | Enormous tumour, occupying whole uterus.  | Os and cervix incised Feb. 27. Tumour subsequently broken up March 27.   | After incision of os, no bleeding. After 2nd operation, fetid discharge, with gradual diminution of tumour.  | Recovered.                        | ..       |
| 19  | Ditto. Communicated.  | S.     | ..  | One year ago, menorrhagia began; constant for last six months; tumour enlarging; extreme anæmia; os very high up.   | Intrauterine fibrous tumour, as large as the head of a 9 months' child.   | Os and cervix incised Feb. 27. Tumour broken up March 20.  | Gradual decrease of tumour; menstruation normal.   | Recovered.                        | ..       |
| 20  | M. Barles. <i>Presse Medicale</i> , 33, 1863.   | S.     | 47  | Regular, 5 years ago, got a blow from the horn of a calf; from this time menorrhagia and yellow leucorrhœa; very anæmic; nutrition impossible, except on raising abdomen. | Tumour size of fist felt through a very narrow vagina; abdomen as large as at full period of gestation, ext. 3 in. above the umbilicus. First part removed weighed 1450 grammes.      | First oper. attempt to remove with forceps failed. Then enucleated in part with hand; large portion like placenta removed. 30 days after 1st operation removed remaining portion of tumour now in vagina.  | Favourably for 10 days aft. op., then pyæmia, death imminent. Treated with quinine intern. and chlorine injections; got better in 30 days. After 2nd operation, not one bad symptom. | Recovered.                        | ..       |
| 21  | Dr. Storer. <i>East Med. and Surg. Journ.</i> 55, 191.                                  | ..     | 60  | Menstruated at 13; catamenia ceased 10 years since; recurred with menorrhagia 4 years since threatening a fatal issue.  | ..  | Ergot given & sp'ge tents appl'd. Tumour p'sent'd. Ecraseur attempted to be appl'd but fail'd owing to broad attachment of tum'r, chain slipping & finally breaking. Tumour now crushed by litho. forceps, & then as much rem. as possible by Simpson's p'tome | Bleeding rather free, but arrested by plugging.  | Recovered 52 days aft. operation. | ..       |

so as not to cut through an inverted pouch of peritoneum in separating the final attachments of the uterine tumour. G. The uterus is then returned. Ice, ergot, stimuli, etc., are to be given as indicated by the symptoms.

The views here epitomised are so very much in accordance with common sense and sound surgery that I do not wish as a whole to controvert them. To one point only of these I would take exception. I do not believe that the grand object is to draw down the

inverted uterus after separating the tumour, so as to bring the tumour as near as possible to the external parts, because this renders the operation easier.

It cannot be doubted that simple traction of the uterus will often suffice to determine inflammation in and about the peritoneum around the organ. In the fatal cases of enucleation, death seems to have been due to phlebitis or peritonitis. Upon this practical point we can learn a lesson from the experience of

practitioners in the removal of *polypus*, as a rule, a far easier operation if the uterus be pulled down.

One case is mentioned by M. Gaubrie (*Bell. de la Soc. Anat.*, vol. xvii, p. 209) where a polypus, supposed to be attached to the cervix (but found after death to be attached to the fundus), was pulled down forcibly. The pedicle yielded and it came away; yet that patient died from latent peritonitis. After death, the uterus was found healthy; but pus was found in the pelvis. Another case is mentioned by M. Demeaux (*Ibid.*, vol. xviii, p. 41) in which an enormous polypoid growth filled the cavity of the uterus. It was pulled down to the vulva, removed, and the parts replaced. There was no bleeding. Peritonitis followed, and death two days subsequently. The *post mortem* examination revealed pus in the pelvic cavity. No uterus could be found in the pelvis; but a puckering and sunken-in portion, within which the ovaries and a vaginal tumour, which was the inverted uterus, were found. This inversion, it is true, was supposed to have been the result of the weighty polypoid growth before traction had been employed. Yet death from peritonitis was the result of the operation. A more remarkable case, however, is quoted by M. Pigné (*ibid.*, vol. xiv, p. 11). This was a polypus as large as a fist, which was taken from a dead woman. During life an attempt was made to remove it; but the finger being first introduced within the rectum, no uterus could be felt. All extraction was now stopped, on the supposition that the tumour was an inverted uterus. Peritonitis and death followed. The *post mortem* examination revealed a pediculated polypus within a very small and anteverted uterus. No injury whatever of the peritoneum had taken place. The traction alone produced the peritonitis. Dr. Greenhalgh has informed me of a case which he saw at Würzburg, where the mere traction of the uterus downwards produced peritonitis and death.

In the recorded cases of enucleation, where traction is mentioned particularly as having been made, the results may be referred to two heads; viz., where the uterus or the tumour was pulled down by fingers, a string, or other violent means; and, secondly, where this was done by forceps. The result in the two cases is very different. Of eight cases, in all but two of which the operation was that of primary enucleation—one being secondary, the other failing altogether—in three, the uterus was for the time completely inverted. Three cases died; in one of these, eversion had occurred; in another, forcible attempts were made to pull down the uterus, which failed.

In eight other cases, in all of which but one (where the operation failed, although the tumour sloughed away afterwards) the operation was primary enucleation, and the forceps were used, no deaths occurred. In two, the uterus was inverted. In two cases, it was the uterus which is stated to have been pulled down by the forceps. In the remaining six, it was the tumour which was so drawn down. All did well, except one patient, who had phlegmasia, and whose convalescence was not established till two months. All the tumours, however, where it is stated, were small; except in the patient who had phlegmasia, where it was large; and in another, where the tumour weighed eighteen ounces, and the diameters were four inches by six.

Was this difference in the result due to the better regulated traction which can be exerted by a forceps, or to the better direction given by it? Probably.

where the forceps were used, the tumours were low down in the true pelvis, and so easily included in them. Short forceps were used in every case; and, therefore, it would seem that the traction was less forcible. Whenever these were used, the results were more satisfactory. The fact is indubitable. Still, it seems difficult to say to what cause the occurrence of peritonitis is due, where it so occurs; when we know that in very many other cases, where traction is employed, it does not occur.

In explanation, I have but three suggestions to make. In cases of retroversion, I have never seen peritonitis follow traction, to restore the organ to a straight direction, so as to allow the admission of the sound. Is it because in these cases the peritoneum is no longer in its normal state, already changed by the very unusual disturbances to which it has for some time past been subject? This is certainly true in many cases of ovariectomy, where numerous adhesions exist. Secondly, peritonitis, and accidents of like nature, are rare, if our patients have been well purged and prepared by remedies before operation; a precaution which, in the case of polypoid growths, is often neglected. Will this explain the difference? Thirdly, there is doubtless, in some cases, idiosyncrasy and a predisposition to peritonitis.

The practical conclusion, at any rate, to be deduced is, that the very traction which is necessary in these cases is often in itself a source of danger and a cause of death; and therefore, if possible, it should be avoided.

*Enucleation by the Induction of Gangrene, or Secondary Enucleation*, as it is called, is a much more tedious operation. Out of fifteen cases mentioned by Mr. Hutchinson, nine recovered, or 60 per cent.; and six died, or 40 per cent. In my table, of ten cases, in one the result was not stated. Of the remaining nine, four died, or 44.4 per cent.; and five recovered, or 55.6 per cent.

Mr. Hutchinson has concluded that, if other unpublished cases were taken into the account, the results of the two modes of operation would be identical. The above figures, however, so far as they go, prove that enucleation by the induction of gangrene is positively less fatal than primary enucleation. Is this due to the traction which is employed being less marked?

The modes in which this operation has been practised have been various. The French method consists in using the knife, in most cases without the use of ergot at all. Dr. Atlee's consists in using, in the first place, ergot in repeated doses, so as to influence the uterus to contract and forcibly eject the tumour. Then the incision is made through the capsule, the ergot being continued, and the tumour gradually separated from the cyst by the finger, cutting, by the knife or scissors, any adhesions which may interfere with such separation. This is continued from time to time; the tumour in the meanwhile sphacelates and comes out by pieces, until the whole has come away, or what remains is capable of enucleation and removal. There can be no doubt that Dr. Atlee's method is an improvement upon that of the French school. It provides a *vis a tergo* to assist the operator.

Again, Dr. Atlee does not limit his operation of enucleation to the uterus. In several cases where, from the size of the tumour or its position low down in the pelvis, while the uterus is high up or difficult



to reach, and in cases of extrauterine fibroid, which occupies similarly a true pelvic position, he does not hesitate to cut right through the *vagina*, so enucleating the tumour. This he performed in several cases; and, so far as I know, he was the first to attempt this mode of procedure.

In estimating the degree of mortality due to enucleation by the induction of gangrene, we learn again a lesson from what occurs in some cases of polypi, which are tied and allowed to slough away.

The experience of Drs. Robert Lee and McClintock gives the following numerical results of cases in which the ligature was applied.

|                | Cases. | Deaths. | Per cent. |
|----------------|--------|---------|-----------|
| Dr. Robert Lee | 20     | 9       | 45        |
| Dr. McClintock | 10     | 3       | 30        |
|                | 30     | 12      | 40        |

And, no doubt, with a large sloughing mass in the *vagina*, exposed to the air and putrefaction, the absorption of putrid pus is a natural result. The same is true with regard to the fibroid within its cyst, only to a greater degree. In the case of the polypus, we have merely mucous membrane, which is our absorptive surface. In the case of the enucleated fibroid, we have a raw ulcerated surface of the cyst, that part which is the vascular part of the tumour, and therefore eminently absorptive, ready to take into the system the vitiated pus. The surprise is that, in such cases, recovery ever occurs. Fortunately, the *vis medicatrix nature* is often powerful enough to accomplish it. It is for this reason that I think Mr. Brown overrates the beneficial results of his modification in the operation, in first incising the os and allowing it to heal before he proceeds to gouging or enucleation. It is of use, doubtless, as it removes one additional source of absorption; but others remain.

The practical lesson which is taught by these remarks, is the necessity of frequent injections and washings with disinfectants, and obviating the production and long contiguity with ulcerated surfaces of effete and putrid matters.

*Enucleation by Gouging*, and inducing gangrene subsequently, is a modification of Mr. Brown's.

The instrument which he uses I now show you. It has already been exhibited before this Society, and, therefore, needs scarcely detain us long. It was originally devised by Mr. Philip Harper. It consists of a hollow tube of steel with cutting knives. Contained in this tube is a hook, which can be pushed up by a spring, and thus grasps the tumour, whilst circular knives are carried through by means of a screw. In this way, a piece can be actually cut out of a tumour much in the same way as the central piece is cored out of an apple.

In the *Obstetrical Transactions*, Mr. Brown has published several cases exemplifying this mode of treatment. I may remark, however, that it is restricted by him to *intrauterine fibrous tumours of the non-pedunculated form*, growing from the inside of the uterus from a broad base. Mr. Brown has given us four cases in which he gouged in this manner. In three, a cure followed; but in one, the operation led to a fatal result. This death he attributes to the absorption of putrid pus through the cut edges of the cervix, which was previously laid open to expose the contained tumours. Hence, at present, his mode is in the first place to lay open the cervix, and to wait two

or three days, or longer, till this has healed, before he proceeds to gouge.

The method pursued after the gouging, is to plug up the hole thus made by oiled lint, to arrest hæmorrhage and provoke sloughing of the tumour.

In three of his published cases, however, the tumours were not gouged. In one, the tumour was broken up by a pair of sharp scissors.

I may say that, through the kindness of Mr. Brown, (who has given me the notes of several of his cases, even hitherto unpublished), I know of two more examples in which, after the incision of the os, the tumour was broken up by scissors; in all of which recovery, in one case disappearance of the tumour, followed.

But a method which is likely to supersede in great measure these more bloody operations, is simple incision of the os, subsequently carried right through a portion of the tumour.

A published case of Mr. Brown, given in the *Obstetrical Transactions*, vol. iii, p. 76, is, however, peculiarly interesting, as the cure was open to ocular inspection, a piece of good fortune not always met with.

This was the case of a single woman, in whom, some seven years previously, he had removed from the os uteri a fibrous growth of about the size of a walnut; and in whom, at the time of the second operation, he had distinctly made out three fibrous tumours just within the os and projecting into the *vagina*. The os and cervix were freely cut open; and then each of these tumours was deeply cut into; the cut surfaces being dressed with oiled lint, and the *vagina* plugged. All these dressings were removed in forty-eight hours, and the *vagina* daily injected. A month afterwards, two out of the three growths had entirely disappeared, and the third was reduced to half its size.

In two other unpublished cases furnished to me by Mr. Brown, the same result was as conclusively observed. I do not dwell on these, because they are as yet unpublished. Altogether, he has mentioned to me ten cases in which this simple plan of incision of the external os was practised with the best results. As these are, however, only a few among several which will shortly be made public, I only ask you to wait and judge for yourselves.

Here we have, then, a practical lesson taught us. The mere incision will suffice to cause the absorption of the tumour. It is a lesson thus taught, from which Mr. Brown appears himself to have profited, as I now learn that in most cases he no longer gouges, but makes free incisions. The plan is safer. Sloughing in the tumour is thus set up, and this is disintegrated, and diminishes in size, and finally disappears.

The treatment which I have pursued in the Samaritan Free Hospital, where the tumour could be reached from the external parts twofold, has been the following: Sponge-tents from time to time; scraping the mucous membrane; and injecting iodine solution or the tincture of sesquichloride of iron. It is not in every case thought necessary to cut open the os.

In April 1861, I employed this method on a woman, aged 43, who suffered from menorrhagia induced by a large fibroid. This filled the pelvis, and was situated in the posterior wall. The os could be felt high up behind the pubes. The sound penetrated about

three inches. The os was dilated. An attack of peritonitis supervened; from which, however, she recovered well. She left the hospital relieved, feeling much better, and conscious that the tumour had diminished in size.

The supervention of peritonitis, after even so simple an operation as opening the cervix, should here be borne in mind in estimating the mortality. Mr. Brown has lost three out of the ten mentioned. I have known of two cases of death from the same cause, and several in which peritoneal symptoms supervened, but were happily successfully combated. Patients seem also liable to peritonitis for some time afterwards. In a case of flooding from a fibroid, a free incision through the os and tumour was followed by the most satisfactory results, both in stopping the hæmorrhage and reducing the size of the tumour, and the patient returned apparently cured to her own home; but in a few days subsequently peritonitis set in. The *post mortem* examination revealed cellular abscess, which had burst into the peritoneum.

We must, therefore, be prepared, even in so simple an operation as the mere incision within the tumour, for accidents. Upon the whole, however, if we bear in mind that the tumour, if once wounded, will not heal, and must undergo partial sloughing or absorption, it is clear that an incision, if performed within prudent limits, is equally as efficacious as the gouging or breaking down of the tumour. These limitations must, however, be attended to. A series of small and successive wounds will produce less constitutional disturbance than one large one. Between the operations, the patient has time to rally and gain strength. The operations may not be so grand and striking; but they are safer for our patients, and this, after all, is the great end of every surgical interference.

Another point, however, has to be touched upon. In my second lecture, I spoke of the difficulty of making a correct diagnosis of the exact position of fibroid tumours, if high up above the true pelvis. It is true, that I then pointed out to you how, by the pelvimeter, you might often make out the diagnosis more correctly. Still, if the cavity of the uterus be short, if the bladder do not extend high up, if the rectal examination be not satisfactory—then the diagnosis must be obscure; and you may, by incising the os, get into the peritoneum, as occurred in one case I then mentioned. There is another disadvantage, also, which will at once strike you from what has been before said; that, in attempting enucleation in a case where the fibrous tumour is above the true pelvis, and not easily reached from below, the traction exercised to bring it down must of necessity be more forcible, and the risk of the operation proving fatal by peritonitis following the traction be greater. Any attempt, therefore, at enucleation in such cases must be very doubtfully determined upon, and even mere incisions very carefully made, lest the peritoneum—of the posterior or anterior *cul-de-sac* especially—be wounded.

[To be continued.]

**MORTALITY AMONG PHYSICIANS.** Five members of the resident medical staff of Bellevue Hospital, New York, have paid the forfeit of their lives, and ten more have barely escaped death, since the 1st of May last, from fever, contracted in the discharge of their duties.

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ROYAL PORTSMOUTH, PORTSEA, AND  
GOSPORT HOSPITAL.

TWO CASES OF NECROSIS OF THE BONES OF THE  
GREAT TOE, TREATED CONSERVATIVELY  
WITH SUCCESS.

**CASE I.** F. F., aged 52, was admitted November 10th, 1863, under the care of Dr. Page, with necrosis of the bones of the great toe. There was a fistulous opening and considerable enlargement; the fleshy parts were otherwise in a healthy condition. The patient was unable to walk on the foot. The operation was as follows. An incision was made in the track of the diseased bones, and another across the metatarso-phalangeal articulation; the first phalanx was removed with a forceps, and the head of the metatarsal bone nipped off. The wound was brought together with sutures, and water-dressing applied. The patient was discharged cured in twenty-one days.

**CASE II.** H. G., aged 54, was admitted March 1st, 1864, under the care of Mr. Porson, with partial necrosis of the phalanges of the great toe and the head of the metatarsal bone. The operation and result were the same as in the previous case. The patient was discharged cured in twenty-six days.

These two cases are interesting as examples of conservative surgery. Mr. Fergusson, in his second lecture at the College of Surgeons, alluded to one or two cases where the thumb or finger was saved; and a case is reported in the *Lancet* of June 4th last, at the West London Hospital, of partial necrosis of the phalanges of the forefinger, under the care of Mr. Teevan; several pieces of dead bone were gouged away, and an useful finger was the result. In both the cases treated at the Portsmouth Hospital, though the first phalanx of the great toe was removed, with the head of the metatarsal bone, no lameness followed. The patients, both labourers, are now following their usual avocations, doing heavy work. A short time ago, amputation would have been performed in both cases.

## Original Communications.

FOREIGN BODIES ON THE SURFACE OF  
THE EYE: THE SUBSTANCE OF A  
LECTURE.

By HAYNES WALTON, F.R.C.S., Surgeon to the  
Central London Ophthalmic Hospital,  
and to St. Mary's Hospital.

GENTLEMEN,—You will not long be in practice before being called on to exercise your skill in the removal of substances from the eye. From the commonness of the accident, you cannot escape an application. The frequency of it, and the pressing necessity, causes the aid of non-professional persons to be sought.

The nature of the injury varies from the most trivial and temporary inconvenience to consequences



fatal to the eye; and the ill result depends on the size of the thing that is lodged on the eye or entered, the force with which it is projected, and the mode of attachment. So that the eye may be damaged or destroyed at once, or ultimately by secondary causes.

It is wholly unnecessary to describe minutely the symptoms of a patient thus injured; the thing is self-evident. The sensation, the irritability of the eye, with the flow of tears, and the almost impossibility of opening it, all point to the fact.

When a substance is lodged within the eyelids, the patient may be able to define its exact seat—a matter of some moment; but when he cannot, and a survey of all the exposed parts of the eye fails to detect it, the eyelids should be retracted, and a greater surface of the globe of the eye exposed, the entire cornea, and some of the sclerótica beyond, rendered visible. Should that not suffice to reveal it, the interior of the eyelids must be searched—the under by depressing it and pulling it from the eyeball, which should be directed upwards; the upper by reversing it, that is, turning it inside out. Nineteen times out of twenty, the object sought will be found about midway on the tarsus, and rather near the edge. Yet, with all this, a small extraneous substance may still remain concealed, as the recess of the upper eyelid has not yet been exposed; and to unfold or open it to view, a narrow spatula, or paper-knife, or something of this kind, is required. But a minute particle may still escape observation in this situation, especially by artificial light; for the peculiarity of this recess may prevent perfect and satisfactory exposure. A jet of tepid water, thrown up from a syringe with a bent pipe, projected with sufficient force, should be employed whenever, in such a case, there is reason to suppose that anything remains. There are occasions when, from the multitude of the particles, the syringe cannot be dispensed with.

From less sensitiveness of the oculo-palpebral fold of conjunctiva of the upper eyelid—the sinus, as it is more frequently called—the presence of a body may not be felt, or suspected, till suppuration or inflammation ensues, or a fungus sprouts out.

It is strange, indeed, that in these instances the occasion or time of the intrusion of the substance may have been quite disregarded, or brought to mind only when questions are put about the probability of such an occurrence; and weeks and months may elapse between the period of the accident and the first symptoms of distress, which are generally ushered in by conjunctival inflammation, with mucopurulent, and ultimately purulent, discharge, like an ordinary purulent ophthalmia. Many of such remarkable cases have been treated by me; and some of which I have recorded in my ophthalmic work.

On the cornea, next in frequency to the inside of the upper eyelid, do the intruded particles attach themselves. When very minute, they are apt to be overlooked, especially if opposite the pupil. They may merely rest in opposition, or be embedded in the anterior elastic lamina, or impacted in the true corneal tissue. In all instances, they should be removed. The chief difficulty consists in retracting the upper eyelid, and steadying the eyeball. This preparatory step demands well doing; and, as it is required in all the difficult and important operations on this portion of the eye, it should be well learned. Some men never thoroughly master it, and therefore such individuals must ever be inferior operators. Of course, if any assistance can be got from retractors and other appliances, they ought to be used. The best instrument for detaching, or hooking out the particle, is a miniature gouge. It is more generally applicable than any other, and injures the cornea

less. I have succeeded with it, when other men have failed with needles, cataract-knives, and other angularly pointed blades. A little nicety is required in the manufacture; but this is well understood by Weiss. A minute pair of forceps I have found useful in removing wood splinters. In some few cases, I have incised the cornea a little before I could extract certain bodies.

Everything that relates to injury or disease of the cornea should be regarded with deep interest, as the sense of sight is more frequently impaired by the spoiling of this part of the eye than any other.

Always persevere in your attempts to extract a body, so long as it has not passed beyond the cornea. The exception must be under very peculiar circumstances. In the natural process of separation by ulceration, or by sloughing, there is more or less risk to the integrity of the eye from opacity or partial staphyloma; and more certainly there is danger of entire destruction of the organ from suppuration of the cornea, and, it may be, of the eyeball. Even the remarkably rare occurrence of a body being encysted is not without its perils; for I have known the accompanying action prove fatal to the integrity of the retina, and destroy sight. I have seen ulceration of the cornea, and prolapse of the iris, occasioned by the presence of a particle of iron that had entered a week before, but which was so diminutive that a surgeon did not detect it.

I could quote many parallel cases of danger to the eye, even when the foreign body had been superficially placed. The only exception, I imagine, to interfering, except to gratify a patient, with any extraneous substance in the cornea, is when we find it deeply embedded, and many days or months have elapsed without any ill effects arising—the surrounding portion of the cornea not being hazy; and pain, vascularity, and lachrymation absent; or when there has been complete cessation of all acute symptoms.

In such cases, the process of encysting takes place; a layer, or bed of new material is deposited. But such a chance must not be trusted to, nor at all calculated on; for it is a very rare occurrence, and may never happen in the long experience of a man. Besides, the form of a body, and the peculiarity of impaction, may prevent it, as in the case of a bit of iron, with one end protruding on the inner side of the cornea. The irritation that is then set up is sure to spoil the eye. Notwithstanding the long and persevering attempts that I have made many times to remove deeply embedded things, I have never had any ill result. Never has there been suppuration of the cornea; nor in the anterior chamber; nor has there been inflammation of the eyeball.

After a metallic fragment, especially of iron, has been removed, some rust, or mark, or stain, may remain. This is of no consequence, and should not be pricked at, nor be attacked with chemical reagents; for it is soon cast off. Very little practice enables a surgeon to ascertain when the particle has been removed. Carbonised and other substances act similarly; and without a knowledge of this, unnecessary injury may be inflicted. I have known vegetable matter produce stain.

The employment of magnets has repeatedly been suggested as an easy and effectual means of extracting bits of iron and steel; and various shapes have been given to them, some pointed, some crescented, and so on; but they are mere playthings, and not of any practical value.

After-treatment is seldom required; the symptoms disappear as readily as they were manifested. When inflammation has been severe, and there is pain, with heat and intolerance of light, a fold of thin rag, large enough to cover the eyelids, dipped in cold water,

applied, and renewed every few minutes, will soon give relief. The addition of some narcotic to the water may be useful. This, with rest to the eye, quiet of body, moderate abstinence, amply suffice for every case.

In all instances, the eye should not be rubbed and irritated. The sensation of something remaining often exists long after the extraction.

I suspect that the majority of metallic particles that get imbedded in the cornea are forced in by the common habit of rubbing the eye when anything enters.

No advantage would accrue from my enumerating the various substances in the mineral and vegetable kingdoms that may enter the eye.

The conjunctiva may be penetrated, and a particle of matter remain between it and the sclerótica. Encysting is likely to follow. I have seen several examples—I should say many—although I have never operated. The patients have either applied to me on account of something else, or I have met with them accidentally and spoken to them about the matter. Iron and copper have remained encysted for years.

The sclerótica itself is often penetrated, and retains bodies without much inconvenience. I have several times removed them when troublesome by snipping through the conjunctiva, raising it from its attachment, and then accomplishing the desired end. Generally it has been metal that has entered, and forceps have been required for the extraction. I do not include in these remarks, injury to the eye from lime and other chemical agents.

The larvæ of insects are sometimes found beneath the eyelids; and this is not very astonishing when we remember that flies deposit their larvæ in different parts of animals. The occurrence has been noticed after a fly has accidentally entered the eye. It has occurred to drunken men asleep in fields. Several cases are on record of the successful removal of the worms. I know of one only in which the eyeball was damaged through perforations.

## DEATH WITH TETANIC SYMPTOMS: THE CORONER'S COURT.

By T. C. LEAH, L.R.C.P.Ed., Hyde, near  
Manchester.

ELIZABETH SHAW, aged 14, the daughter of a beer-house-keeper, a stout robust girl, previously in good health, was seized about 2 p.m. on Thursday, June 30th, with violent tetanic spasms, persistent in the trunk of the body—opisthotonos—but alternating with relaxation in the extremities. The slightest touch, as the act of examining the pulse, brought on a return of the spasms in the extremities, as if from an electric shock, and increased the trismus. The head was forcibly drawn back; the face flushed; the surface warm and moist; the pulse weak and irritable; the muscles of the abdomen were much retracted; the feet incurvated; the intellect was unimpaired. There was no vomiting from the commencement of the symptoms to the time of death, which occurred before any remedial measures could be adopted, and under an hour from the first attack.

In reply to inquiries, the mother reported that the girl had not partaken of dinner, nor of food nor liquids since breakfast, so far as she knew; that she had not complained of illness, not taken any medicine; had received no wound nor bruise; had no cause for mental anxiety; that, in fact, she had been unusually cheerful during the morning, and had taken an active part in household duties and the family washing till the seizure. The catamenia, which commenced on the previous Saturday, had

ceased on the evening before the seizure; and to this circumstance the girl had directed her mother's attention.

I declined to certify the cause of death, and advised the case to be reported to the coroner for the district. An inquisition, I understand, was held on the 2nd inst.—the day but one following the death. No medical evidence was taken; no *post mortem* examination was made; and a verdict of "Died in a fit" was returned.

The details of this case may possibly be interesting, as affording an illustration of the inefficient manner in which coroners' inquests in sudden and doubtful deaths are frequently conducted, and verdicts recorded, without the slightest medical evidence. A medical coroner would, I think, have considered a full and rigorous investigation imperative, with such characteristic symptoms present during life, conjoined with so rapidly fatal a termination.

[There can be no question that not holding an inquest in a case such as here described is quite inexcusable. The symptoms assuredly much more resembled those of poisoning than of disease. EDITOR.]

## Transactions of Branches.

### BATH AND BRISTOL BRANCH.

#### CASE OF DISEASED HUMERUS.

By CHARLES STEELE, M.R.C.S., L.R.C.P.

[Read at Clifton, April 28th, 1864.]

THE patient, from whom the specimen now before you was taken, was seen by me for the first time in August 1863. The history of the case then given to me was as follows.

About eighteen months previously she felt aching pain, similar to that of rheumatism, in her right shoulder. In addition to this pain, there were soon perceived puffy swellings, between the metacarpal bones of the thumb and index finger, and of the index and middle fingers; these swellings used occasionally to appear, continue for a short time, and in a few hours subside. Aching pain from the hand to the elbow, and from the elbow to the shoulder, was also felt. These symptoms, occasional and slight at first, gradually increased in frequency and intensity. The suffering was noticed from first to last, to be most severe at one o'clock in the night. The following occurrence, which took place in November 1862, with its consequent alarming increase of symptoms (the pains having previously not been very much noticed or complained of) was the first to draw the serious attention of the patient and her friends to her state, and make them seek assistance beyond their own household remedies.

One day she perceived her son, who was near her, slip; and, in order to prevent his falling down, suddenly extending her right arm, gave him a good push (bending back her fingers in doing so). She immediately felt as if she had struck first the elbow and then the shoulder, and as if the arm were broken. The same night she complained of great pain in the shoulder. After this she was never able to cut her own meat, or to raise a teapot or any such weight; but could for some time feed herself, and perform slight actions. The hand swelled much, and was obliged to be kept in a sling. The upper extremity also required to be kept warm, as increased pain was complained of on its becoming at all cool. At first, and for some long time, considerable relief was experienced from the application of hot water; this failing, ease



was obtained by bathing with camomile fomentation, and afterwards with poppyhead fomentation. Then (the arm becoming too tender to bear bathing) flannels, wrung out in hot water, and laid on the painful parts afforded comfort. Sleep followed the relief occasioned by each of these consecutive remedies.

In February 1863, the scapula seemed to drop backwards and outwards from the ribs. At the same time a swelling, which was always of a rounded shape, formed over the last cervical vertebra; this was variable in size, sometimes hard, remaining so for a week or longer, then softening. Pain was occasioned by it, which, when the swelling was large, was extended with a dragging sensation into the eyes. In August 1863, this enlargement began to diminish, but it never vanished; it was relieved and lessened by a liniment containing turpentine, camphor, and vinegar.

In January 1863, swelling began in the deltoid region of the right shoulder; this, rounded in form, sometimes very large but variable in size, was at times hard, afterwards becoming soft, but always stiff after being hard. The veins also of the forearm became varicose. A slight see-saw motion backwards and forwards continued for a short time gave relief, and appeared to the patient to put something in place in the shoulder; the same motion from the side outwards greatly aggravated the suffering.

For many weeks during the months of March, April, and May 1863, the patient used to have at one o'clock at night fearful attacks of pain, during which she could let no one touch her, and not unfrequently did not know those around her for a short time; she screamed dreadfully, being heard in the street and neighbouring houses. She flung off the clothes, and threw about freely the right arm (which, except during these paroxysms, she could not bear to be moved). These attacks lasted an hour or more, and after them she sometimes fell into a stupor, but at other times continued restless. For some months subsequently, these attacks were of less frequent occurrence.

Previously to my seeing her in August 1863, she had been attended by other practitioners, and had out of many remedies tried, found most relief from a mixture of carbonate of iron and treacle, which even prevented her having the paroxysms of pain so frequently. This, however, had to be discontinued, on account of its causing constipation and pain in the bowels. Chlorodyne internally gave temporary relief, easing her much and causing sleep, but it caused sickness. Externally, a liniment containing chloroform gave relief for the first few days. Oil of horse-chestnut gave much and prolonged relief at first, but lost its effect in eight applications. Pine oil increased the pain. Laudanum mixed with water gave temporary relief, deadening the maddening pains.

In August 1863, when I saw her first, I found her a large, fat, flabby woman, of pasty complexion, aged 59 years, lying on her back with her right hand lying on her epigastrium and looking helpless, having considerable swelling on the deltoid region as previously described, which, however, was so tender as not to bear touching for examination, but only slight swelling on the last cervical vertebra, complaining of the afore-mentioned pains, and also of a feeling in the skin of the forepart of the forearm, as if it were scraped with a knife. This sensation was greatly relieved, in fact almost removed, by painting the part affected with volatile solution of nitrate of silver. She had very little appetite, it having been bad from the commencement, and remaining so until the end of her illness, her main food throughout being a very little thin bread and butter to eat, and water to drink. Spirits, wine, beer or porter, each time they were tried, greatly aggravated her sufferings, and consequently were never used. At this time she was able

to pass from one room to another and lie on a sofa during the day; but after November 1863, she never could leave her bed.

I tried various external applications, but none gave real relief except aconitina, one grain of which in a drachm of fat gave at first a night's rest, then a few hours' quiet, and lastly, not more than two; and then the pain produced by the exposure to air and rubbing on the ointment became so severe, as to cause this to be discontinued, and nothing but flannel to be applied. One regular temperature of about 70° in the room could alone be borne; any increase or diminution of heat directly bringing on intense agony in the arm. Of internal remedies which I prescribed, very great comfort was experienced from the following:—

R Sodæ hypophosph. gr. x; acidi phosphoric. dil. mxx; syrupi et aquæ ad ʒi. M. Fiat haustus ter die sumendus.

My patient more than once remarked to me respecting it, "There must be something to cause sleep in that medicine, for I often fall asleep in the day-time after taking it"; and on several occasions when she was unable for some days to procure the medicine, she invariably became worse. This mixture she took from September 8th, 1863, till a fortnight before her death, which took place on January 23rd, 1864. This, however, could not ward off her fearful night attacks, and hyoscyamus with camphor, conium, and belladonna, having failed to abate them, recourse was had to morphia. This, from being taken in drachm doses of solution of acetate of morphia once or twice a week in September, and giving occasional good nights' sleep, was increased in quantity and frequency until latterly it was necessary to give it every night in doses of eighty or even ninety minims, with sometimes a repetition of a drachm; and even then sleep was not always obtained. On one occasion one hundred minims were given at a dose. Latterly, the afore-mentioned frightful paroxysms of pain became of daily as well as nightly occurrence. It may be wondered that I did not administer chloroform during these attacks; but I was deterred from doing so by my patient giving evident manifestations of having a fatally degenerated weak heart.

In Christmas last, vital energy appeared to be succumbing to the torture; but she rallied, and lasted until January 23rd, when after one week of sinking, during which she could take nothing but a few drops of water at a time, she expired.

The friends willingly acceded to my desire to make a *post mortem* examination; which, however, owing to the medical friends, whom I could ask to be present, not being able to attend, and my having only the assistance of a female relation, was not so complete as was desirable. The shoulder only was examined. It was greatly swollen; the prominence being principally in the deltoid region, and giving an elastic feeling to the touch. A longitudinal incision being made, skin, a half-inch layer of fat, and a layer of attenuated muscle, were exposed; then a membrane-like layer of fascia, containing first a thin layer of soft white brain-like substance, and within this a large accumulation of thick brown mucilaginous fluid, which escaped freely. The finger introduced through this fluid impinged on these long slender laminae and spicula of osseous growth, now to be seen in the specimen before you. The bone was remarkably brittle, scarcely requiring the use of the saw to divide it; and the soft connections about the head of the bone readily tore away with an occasional touch of the knife. The upper two thirds of the humerus, and the scaphoid fossa and inferior border of the scapula were denuded and roughened on all parts; there, however, being very few spicula, and those few very short, on the scapula.

These laminae and spicula stand at right angles to

the shaft of the humerus, are very thin and fragile—are densely packed except where large interspaces are left; some of the spicula are an inch and a half long, most half an inch to an inch long. They are most prominent on the deltoid region of the bone, and again, on the inner border of the shaft.

One fact mentioned in description of ordinary osteosarcoma is that little pain is felt. In this case pain was the leading feature, so constant and intense, as to lead me to expect to find at the *post mortem* examination, cancer, probably cerebiform, in relation to the brachial plexus of nerves. But these two circumstances appear to me to account for the great suffering; namely, the extremely soft nature of the interosseous substance leaving the spicula of bone bare and prominent, and the close relationship of the brachial nerves to the diseased mass. The inevitable result being the constant free application of a large bone brush to the assembled number of the main trunks of the nervous supply of the whole right upper extremity. The scraped sensation experienced in the cutaneous nerves of the forearm is interesting in a physiological view, it being doubtless caused by scraping of the main trunks near the shoulder joint by some bony point; and is closely analogous to the feeling experienced in stumps, as if the amputated toes or fingers still remained in connection with the body.

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## British Medical Journal.

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SATURDAY, JULY 16TH, 1864.

### THE ARMY MEDICAL SERVICE.

THE exertions lately made by the British Medical Association to improve the condition of the army medical officer cannot fail, sooner or later, to have a beneficial effect. If red-tapism and dull officialism still choose to shut its eyes and ears to the plainest facts and the most unmistakable of hand-writing, still there is happily a force—that of public opinion—that can see and duly appreciate them. And it is, we fear, through this influence alone that we can hope to see reforms effected in the Army Service. All experience teaches us the lesson. The movement referred to, it is true, can hardly be passed over without producing some useful effect. When the President of the Royal College of Physicians, the President of the Royal College of Surgeons, and the President of the Medical Council, backed by a powerful body of leading members of the profession, all unanimously appear at the door of the War-Office and of the Horse Guards, and tell the chiefs of those departments that the medical profession will not enter the army unless a due and fitting position is assigned to its members—when this consent of opinion is thus forcibly demonstrated—the movement cannot be pooh-poohed. It is a fact which must receive due attention.

But so far as the War-Office and the Horse Guards are concerned, we must candidly say that, as

far as we can read the results of the interviews of the deputations with them, little is to be hoped for from them. There is little hope that any amelioration of the army surgeons' condition will spring from any action of theirs. To us the results of those meetings seemed to say, it is only by pressure from without that anything can be gained.

Most strikingly was this exemplified in the interview with the Commander-in-Chief. He had two steady stereotyped answers to every statement that was urged: That point, gentleman, is a matter of *discipline*; the army lives and breathes through discipline; discipline is its soul and essence; and that other point, gentlemen, is a matter of *finance*. We must, above everything, maintain discipline, and your demands interfere with discipline; therefore, they cannot be listened to. And as for the other point, really we cannot touch it; the Chancellor of the Exchequer holds the purse-strings of the country, and what you ask is really all a money question. You must go to the Exchequer about that.

The position, therefore, assumed by the army authorities seems to be well defined. They will, of their own motion, grant nothing. "Whatever is, is best", in their esteem.

Unfortunately, in the House of Commons, we have no medical representative who is capable either of understanding our professional sentiments, or of bringing them forcibly under the notice of public opinion. But there is one gentleman there, at all events, General Peel, who is thoroughly acquainted with the whole history of this affair, and who has always shown himself a warm friend of the army medical surgeon. Why should not this gentleman be requested by our Association to bring the subject under the notice of the House? In cases of this kind, before all things, what is wanted is publicity and discussion before the public. We throw out this suggestion, and hope it may fructify.

But, in the meantime, we must strongly urge upon the profession, this one thing above every other, that they hold together. Let our brethren be resolved to maintain the position they have assumed, and assuredly they will gain their point. Why? Have we not manifestly got the game in our own hands? Let men refuse to take service on terms which they hold to be derogatory, and necessarily they will win the day.

Most assuredly, unless we have misread the intentions of the Horse Guards, so long as medical men—qualified medical men, of any age or description—can be got to do the work of the army, so long will the present condition of the army surgeon remain unchanged. As for high-classed men, it is certain, that they are neither sought for nor desired in the army. The Duke of Cambridge has manifestly a dislike to competitive examinations; and, in fact, as he said, regards them as one of the chief causes of



falling off of applicants for army medical honours. The Horse Guards theory and the Netley School theory are evidently totally opposed.

For our own part, we cannot but regret that the deputations did not refer more markedly to the professional grievances under which the army medical officer labours. These grievances, at all events, are distinct and tangible, and can be traced home directly to the Horse Guards. They are grievances which originate and date from the Horse Guards; and the Commander-in Chief could not in their defence have sheltered himself behind the plea of discipline or finance. His department alone is responsible for them. Our own opinion is, and has been from the first, that many of the most positive evils which affect the army medical officer may be traced home to the immediate management of the medical service. Let any of our readers look at the long list of professional grievances of the army medical officer detailed in the pages of this JOURNAL, and ask himself if these are not of a kind which lie solely at the door of the Army Medical Direction? Who is responsible for the burthensome economy which presses in all directions upon the army medical officer? Who is responsible for the wrong and harass which meets him when he would faithfully perform his duties outside of a dull routine? Who is responsible for the system of confidential reports, which requires of the surgeon that he should report touching the estimation in which his assistant-surgeon is held by the commanding officer of the regiment? Who is responsible for the short shrift given to the medical officer when sick? In a word, who is responsible for those many professional grievances of which the army medical officer so sorely complains, and which we have elsewhere fully detailed, except the Army Medical Direction?

Admitting that the Medical Direction has no power over Queen's Warrants and Horse Guards' Orders, still it is manifest and clear that it has an immense power in the direct management of the department over which it presides—over the details of the medical service. Will any one believe that, if the Army Medical Direction had shown and manifested a warm and fitting sympathy with its army medical brethren, it would have so thoroughly alienated their feelings? Are we to believe that the body of army medical officers would have been so grossly unjust as to complain of a chief who had done his best to promote their interests? Are we to believe that these gentlemen would not rather have come forward and expressed their deep sympathy with him, than have so widely and so loudly uttered their complaints?

We admit the difficult position in which the Army Medical Direction is placed. But that Direction is a very high and a very responsible position; and happy and well is it that he who occupies it should feel that

he has to give an answer to his profession, as well as to his superiors, touching the performance of his duties. Instead of cavilling at that Direction, gladly would we give our aid to it in the carrying out of reforms in the Army Medical Service. But, in the performance of our public duty, we feel that there are others who have a claim upon our consideration—a far greater and higher claim; we mean our army medical brethren. By their very peculiar position, they are debarred from the making of complaints. In the army, and most properly, to hear is to obey. It is, therefore, in their behalf especially that we feel bound to speak firmly and uncompromisingly. It is only through us and the profession that their complaints can be heard—their just demands receive a hearing. Glad also are we to find that not a single one of the many complaints of the army medical officers detailed in these pages is capable of disproof, as being untrue. We have admittedly stated the simple truth. Let the Army Medical Direction only exercise all the influence which it possesses—which it must possess—in favour of the army medical officer, and we will promise the Direction that, even if its efforts fail in accomplishing the ends desired, it shall still receive the warmest thanks, the best support, and the sympathy of the profession at large. Let the Direction only put forth its best exertions in the alleviation of the army medical officer's grievances, and we will promise that, whether its exertions be or be not crowned with success, it shall still receive the applause and thanks of the whole Army Medical Service. But in so far as that Direction is responsible for the grievances of the army medical officer, and so long as the Direction takes no action to alleviate those grievances, over which it has undoubted control, so far and so long shall we consider it our duty to call that Direction to account at the bar of professional opinion.

In conclusion, we must in justice observe that the different deputations were received with the greatest courtesy, and listened to attentively. The Duke of Cambridge expressed the highest admiration for the medical profession; all his combatant brethren in the army look upon the medical officer as a friend and a brother, and have the warmest and best feeling towards him when he conducts himself properly. Dr. Gibson assured the deputation which waited on him, that he had always had his heart and best wishes in his profession; and that, since he had presided over the department, he had done everything he could to advance the position and secure the comfort of the army medical officer, and most anxious was he still to do so.

But what is the upshot of the deputations, when we come to look *ad rem*—when we come to total up the actual proceeds? There was that impalpable quantity (which, of course, must be estimated according to the different impressions derived from the

various interviews by the gentlemen who formed the deputations) represented by the moral influence exercised on the heads of departments; and, as we have already said, such an unanimous expression of professional feeling can hardly be without some useful effect on the official mind, even though it be merely of a temporary character. But there was also, alas! to every proposition the convenient official reply of a *non possumus*. Infallibility itself could not have more blandly uttered the impassable negative. Moreover, unless we misread the official Horse Guards mind, behind the expressed *non possumus* there peeped out an unmistakable *nolumus*. There was no spark of that *will* shown which is notoriously so often the father that points out the *way* how to do it.

Such is the impression which we derived from these interviews. We think it right, therefore, to throw out no false hopes to our brethren either in or out of the army. We tell them that the conclusion we have arrived at is this: that, if ever they get the things they now ask for, it must be through their own action, or rather complete inaction. There is little hope of help to be had by appealing to Jupiter. They must put their own shoulders to the wheel to get them out of the mire. So long as qualified men (we mean in the legal sense) can be persuaded to come forwards by the hundreds in answer to such a degrading advertisement as that issued by the Director-General, so sure may the profession be that the condition of the army surgeon will remain unchanged. The Horse Guards does not expect, nor, as we fancy, desire, that first-rate men should enter the army. It dislikes the competitive examination. It does not pretend to attract the *élite* of the profession. Men in the third class at Netley, it confesses, are quite good enough for its purposes. As we were last year told, at the meeting of the Branch of the Association at the Crystal Palace, by a competent army authority, a gentleman not of our department in it: "Gentlemen, by your own right arms alone can you ever obtain what you ask for. Use them, and you will obtain it." To his words we fully subscribe.

In conclusion, however, we must observe, that Lord De Grey, unlike the Horse Guards, did show some signs of a desire to do justice, although he promised but little. His lordship has, happily, not yet got his mind thoroughly tied up and docketed with Horse Guards' red tape. He showed himself to the deputation to be thoroughly master of the subject of the army medical service, and promised to give it his most careful consideration. That Lord De Grey's promises are not mere words of compliment, we have the proof in the fact, that he has already appointed a commission, consisting of Sir James Clark, Dr. Parkes, and Dr. Sutherland, to investigate the subject. He has been happily inspired (and the sign is a hopeful one) to take none of the Horse Guards

officials into his councils. The report of this commission will be a most important one; and it is hard to see how Lord De Grey can escape from adopting its conclusions. A commission appointed by himself and composed of men of the above position, cannot fail to have great weight with the country, and to influence the opinion of the Government. That it will have any influence on the stolid pachyderms of the Horse Guards, we do not for a moment believe; but even his Royal Highness the Commander-in-Chief is amenable to public opinion.

OUR associates who intend to go to the meeting at Cambridge will be probably gratified to learn that the local committee have made arrangements with the Great Northern and Great Eastern Railway Companies for the issue of return tickets during the period of the meeting, available up to the 6th August inclusive. Members, to obtain them, must produce vouchers, which may be had on application to Dr. P. W. Latham, Sidney Street, Cambridge.

PROFESSOR PANUM of Kiel has lately published, in Virchow's *Archiv*, a treatise on the quantity and the quality of the blood in animals deprived of food. His experiments bring forth conclusions totally opposed to those which have been hitherto accepted as the legitimate results of Chossat's and Bidder and Schmidt's researches. Panum maintains, contrary to these observers, that changes in the quality and quantity of the blood are not to be regarded as the main facts in the fatal effects which follow inanition. Panum maintains: 1. That neither the quantity of the blood in relation to the weight of the body, nor its essential constituents, especially the blood-corpuscles and the fibrine, are altered in any marked degree even under complete inanition; 2. That the colouring matter of the corpuscles is not essentially altered by inanition. And from this it follows that the blood is not *in toto* the nutritive material, but only its means of conveyance, or the medium of applying the nutritive matters taken up in the stomach, etc.; that neither are the blood-corpuscles nor the fibrine essentially nutritive materials; that a certain portion of the albuminous matter of the serum must be regarded as essentially nutritive matter of the body; that the essential symptoms of inanition do not result either from want of blood, nor from impoverishment of it, nor from deficiency of red corpuscles; but upon weakening of the nervous and muscular systems, and of the circulatory organs, consequent upon the absence of the nutritive materials required for their support. Consequently, it results from this, that transfusion of blood cannot help those suffering from inanition; and that such transfusion will impede rather than assist recovery.



THE annual meeting of the Metropolitan Counties Branch was held at the Crystal Palace on Tuesday. In retiring from the presidency, Dr. Sibson gave a sketch of the proceedings of the deputations which had lately waited on Lord De Grey and Ripon, the Duke of Cambridge, and Dr. Gibson, on the subject of the Army Medical Service. The proceedings of the deputations apparently gave universal satisfaction to the members of the Branch who were present. The Lancashire and Cheshire, the West Somerset, and the North Wales Branches have adopted memorials similar to those presented by the Metropolitan Counties Branch. On account of the length of the reports of the deputations, we are obliged to defer the reports of several Branch meetings until next week.

WE last week gave a condensed account of the Chloroform Committee; and our readers will not think the Report has come any too soon. We now regret to have to state that, within the last week or two, three deaths from chloroform have occurred in London hospitals.

THE July number of the *Journal of Mental Science* contains an original article on a Classification of the Sciences; Dr. MacCormac treats of the Ulster Revival; Dr. Davey has a lecture on Combe; W. M. a paper on Unlearning; Dr. Clouston contributes Cases of Phthisical Insanity; Dr. Westphal, Cases of Tabes Dorsalis, etc.; and Dr. Ogle, Cases of Primary Carcinoma of the Brain.

THE annual meeting of the Council of the Royal College of Surgeons, for the election of officers, took place on the 14th inst., when Mr. Joseph Hodgson, F.R.S., of Westbourne Terrace, was elected President of the College, in the vacancy occasioned by the retirement of Mr. F. C. Skey, F.R.S., of St. Bartholomew's Hospital; and Messrs. Thomas Wormald, of the same hospital, and Francis Kiernan, F.R.S., were elected Vice-Presidents for the ensuing year. At this meeting of the Council, Messrs. Frederick Le Gros Clark, of St. Thomas's Hospital, and Thos. Blizard Curling, F.R.S., of the London Hospital, the recently elected Councillors, were sworn in and took their seats.

MR. TURNBULL has obtained, through M. Flourens, a commission, who are to decide, in due course of time, as to the value of the process by which Mr. Turnbull undertakes to restore their hearing to those who are not wholly deprived of the sense.

Dr. Fischer has written a treatise on the treatment requisite after tracheotomy. He dilates upon the extreme care required in the matter of clothing, bedding, rooms, food, etc. We fear it is too often forgotten, that the success of tracheotomy depends far more on the subsequent management of the case than on the mere operation.

M. Foley has discovered the uses of "inspiration of oxygen". The customs and habits of the present lead men to exhaust themselves *plastically*; and the oxygen inspirations, we suppose, counteract or repair the aplasticity (if we may invent the term).

At the Paris Exhibition of Paintings, there is a portrait of M. Velpeau—"An Anatomical Lesson", the catalogue says. Velpeau, with his large white apron, sleeves turned up, and his arms held forwards, is about to proceed to work upon a dead body in the theatre. Students are grouped around him, in deep attention. The critic hereupon objects to the details. Velpeau has long since given up anatomical demonstrations. Then, again, where is the dissecting-room? Certainly not at La Charité, nor at the dissecting-schools; for a straw chair is not to be found there, nor a stone table, such as are represented in this picture. Velpeau looks, again, as if he were blessing a great naked boy; and the persons around look as if they didn't know what he was about. Besides, as every one knows, he has no nail on the index of his right hand; and the finger does not bend. Why, then, has M. Feyen given him long academical hands, adorned with beautiful nails? M. Velpeau becomes handsome as he grows old. His elevated thoughts, and the constant exercise of noble functions, have at length removed the once harshness of his features. His face is now marked with a calm dignity and a somewhat mournful serenity. *C'est un beau vieillard!* So says *L'Union Médicale*.

All the world will, we fancy, fully agree with the remarks of M. Bouillaud touching the interminable debate going on in the French Academy on the subject of the movements of the heart. "It seems astonishing that a debate on so simple a subject as that of determining the movements of the heart could last so long. One would think that any person possessed of eyes and ears might settle it; and yet for two hundred years it has been matter of debate! M. Beau, however, is alone in his opposition to all the world. The position which he has assumed is interesting, dramatic, and I might even say enviable."

A Savoy doctor gives some account of the "demoniacal epidemic" raging at Morzine. "It is generally believed that one of the predisposing causes of the disease is the Protestant propagandism carried on in this commune, whereby the minds of the people are kept in the region of the supernatural and the invisible, and consciences are troubled. The disease is confined to the parish; and the patients believe that their seizures can only occur within the parish limits. At Annecy, as at Chambéry, the head clergy are disposed to leave the matter in the hands of the doctors; for, although they do not reject *possession* altogether, they do not see any signs of *possession* at Morzine. The doctors, who have been sent to investigate the matter, are assisted by soldiers."

# Special Correspondence.

## LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

Mr rather protracted silence arises not from dearth of material; for, on the contrary, the last two months have been particularly productive of interesting and important cases under observation in our hospitals; and I will endeavour to select from my note-book whatever I think will interest the general body of your readers.

I must allude, to commence with, to the numerous cases of hydrophobia that have occurred in this town. A short time ago, a boy, aged 11, was admitted into the Royal Infirmary, under the care of Mr. Long. He was bitten four weeks prior to admission. Mr. Long ordered tobacco enemata to be given; and, though the case proved fatal, Mr. Long considered that the nicotine of the tobacco acted beneficially in subduing and retarding the violence of the paroxysms. This is, I think, the sixth case that has occurred in this town and neighbourhood; and the frequent appearance of such a malady has naturally created feelings of apprehension in the mind of the public. Stringent measures have been taken by the municipal authorities. The owners of all dogs "at large" are fined, and all stray and suspicious-looking animals are immediately executed by the police. The number of people mulcted in a penalty amounts, I should say, to thirty per day; and upwards of a thousand dogs have met with an untimely death—the genus "mongrel", I presume, suffering a greater diminution in their ranks than their more aristocratic relatives. It is to be hoped that these means will prove effectual, and that we shall have no further instances of so distressing a disease.

The wards of the Infirmary have lately offered excellent opportunities to those interested in the cure of aneurism, there at present being three varieties of proceeding for effecting the same object; viz., ligature of the artery on the distal side of the sac; ligature on the cardiac side; and lastly, flexion of the limb. As the first mode is not often adopted, I think a few notes of the case may not be considered out of place.

J. L., aged 35, a sailor, was admitted into the Infirmary on May 5th, suffering from a large pulsating tumour involving the parts on the right side of the neck. Above, the tumour extended to a level with the hyoid bone; below, to the second rib; externally, to a point situated midway in the clavicle; and, internally, it encroached slightly on the other side of the median line, the upper portion of the sternum being absorbed. The tumour projected considerably from the contour of the body, and pulsated synchronously with the heart. The right and left pulses were of equal volume, no alteration being apparent. No *bruit* was to be heard anywhere. The patient's voice was peculiarly creaking, and his respiration hurried and stridulous. The diagnosis was, aneurism of the innominate

artery. As it would have been almost impossible to place a ligature on this artery, Mr. Bickersteth determined to tie the artery or arteries on the distal side of the tumour, according to the plan recommended many years ago by Brasdor, and practised by Wardrop. On May 10th, Mr. Bickersteth tied the common carotid above the omo-hyoid muscle. The operation gave immediate relief; the pulsations in the tumour were considerably diminished; the voice assumed its natural tone; and the man breathed freely and without stridor. In addition, he was bled from time to time after the operation. On the ninth day after the operation, he complained of general uneasiness; and, on placing the fingers over the right radial artery, hardly any pulse could be detected, the pulse on the other side being of considerable volume. This condition still remains, though it is not so well marked. The ligature came away on the thirtieth day, and the wound is now entirely healed. On June 28th, Mr. Bickersteth tied the subclavian artery outside the scalene muscles. The operation, never an easy one, was attended with unusual difficulties, arising from the limited incision which the position of the tumour necessitated; the communication of the aneurismal thrill to the parts around, masking the true position of the artery; and, lastly, the great depth of the artery from the surface—three inches at the least—the clavicle being pushed upwards by the swelling. The external jugular vein was tied, and cut across, as it traversed the central line of the incision. A very considerable diminution in the pulsation of the aneurism immediately followed the application of the ligature. So far (July 2nd), the operation itself promises to be as successful as the one performed on the carotid just seven weeks ago; but, as opinion with regard to its effect on the tumour would now be premature, I shall reserve for a future occasion a further consideration of this very important case.

The second variety—or I might, perhaps, regard it as the rule—is a case of popliteal aneurism, in which Mr. Bickersteth tied the femoral artery in Scarpa's triangle. In this case, it was feared that the aneurismal sac had given way. The patient has done well, though a considerable tumefaction still remains from effusion between the sac and the skin.

With regard to flexion, Mr. Stubbs and Mr. Bickersteth have each in their wards a case where cure of popliteal aneurism has been effected by flexing the leg and retaining it in this position, the treatment being continued interruptedly for a fortnight. Both patients were under twenty-five years of age. All these cases being in the house at the same time rendered their observation and comparison particularly interesting.

Mr. Bickersteth at the Infirmary, and Dr. Grimsdale at the Lying-in Hospital, have each had a case of ovariectomy. In Mr. Bickersteth's case, the prognosis was not very favourable. The patient was 40 years of age, and had never enjoyed very good health. She was exceedingly anxious to undergo the operation. She died from exhaustion. There was



not the slightest peritonitis; in fact, the parts about the wound were entirely destitute of action. Dr. Grimsdale performed his operation on June 17th. There were considerable adhesions behind. The patient, I hear, is going on very well, and bids fair to add another to Dr. Grimsdale's list of successful cases.

At the Northern Hospital, Mr. Lowndes informs me that he has been making use of Dr. Simpson's plan of acupressure for arresting hæmorrhage after amputation, and so far has been well pleased with the trial. He considers that the stumps heal faster; and there is much less suppuration, and consequently less risk of pyæmia or secondary hæmorrhage. The last case in which he made use of it was one of amputation at the shoulder-joint; the patient, so far, is doing well.

At the Children's Infirmary, Mr. Hey has had a little patient under his charge suffering from disease of the knee-joint, where either amputation or resection was required. Mr. Hey decided upon the latter alternative. The child has made a good recovery.

Seldom can your correspondent bring his letter to a conclusion without having forced upon him the painful duty of recording the death of some brother practitioner. On this occasion I have to mention the names of two, both of whom were for a considerable period connected with our local charities. I refer to Mr. W. B. Wall and Mr. Newton Heelas. Both were in the prime of life—both house-surgeons at the Northern Hospital. The former held this office for ten years; and, on his retirement, was appointed visiting-surgeon to the Toxteth Park Workhouse, where, like many others holding a similar office, he met his death whilst ministering to the comforts of the poor; typhoid fever proving fatal in a few days. The later (Mr. Heelas) held office for three years, and by his uniform kindly disposition gained the esteem of all with whom he came into contact, and by whom his loss is deeply deplored.

In concluding, I may mention that the new wards at the Infirmary, erected and endowed by the munificence of the late Mrs. Thornton, are now completed; and, in compliance with her wish, will specially be devoted to the diseases of women.

To increase the facilities of the study of pathological anatomy, Dr. Rawdon has been appointed pathologist for conducting the *post mortem* examinations, and giving instruction in morbid anatomy, in connexion with the Infirmary. Dr. Graham, for the future, will give all his attention to the museum connected with the school, Mr. Harrison succeeding him as the demonstrator of anatomy.

**AEROLITES.** MM. Daubrée and Cloez give a very interesting account of some meteorites which fell in the neighbourhood of Orgueil on the 14th of last month. The most curious fact mentioned by M. Cloez is that the stone he examined contained a notable quantity of chloride of ammonium, with chlorides of potassium and sodium and sulphates of magnesia and lime. Five per cent. of the stone, in fact, was soluble in water.

## Association Intelligence.

### BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

*President*—JOHN A. SYMONDS, M.D., F.R.S.Ed., Clifton.

*President-elect*—GEORGE EDWARD PAGET, M.D., Cambridge.

*All the General Meetings of the Members will be held in the Senate House.*

WEDNESDAY, August 3rd.

12 NOON. Meeting of Committee of Council in the Arts School.

2.30 P.M. Meeting of the General Council in the Arts School.

4 P.M. First General Meeting of Members. The retiring President (Dr. Symonds) will resign his office. The new President (Dr. Paget) will deliver an Address. The Report of the Council will be presented, and other business transacted.

9 P.M. The Members of the Association are invited by the Master and Fellows of Gonville and Caius College to a *Conversazione* in the College Hall.

THURSDAY, August 4th.

8.30 A.M. The Members of the Association and their friends will breakfast together in the Guild Hall. Tickets Three Shillings each.

10 A.M. Meeting of the Members of the New Council in the Arts School.

11 A.M. Second General Meeting of Members. Papers and Cases will be read.

4 P.M. Third General Meeting of Members. The Address in Medicine will be delivered by EDWARD L. ORMEROD, M.D.

The Report of the Medical Benevolent Fund will be presented.

Cases and Papers will be read.

9 P.M. The Members of the Association are invited by the Master, Professors, and Fellows of Downing College, to a *Conversazione* in the College Hall.

This day (Thursday), by the permission of the Provost and Fellows of King's College, there will be Full Choral Service in the College Chapel at 3 P.M.

FRIDAY, August 5th.

10 A.M. Fourth General Meeting of Members. A Report will be read from the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund. Papers and Cases will be read.

4 P.M. Fifth General Meeting of Members. The Address in Surgery will be delivered by G. M. HUMPHREY, M.D., F.R.S. Papers and Cases will be read.

6.45 P.M. The Members of the Association and their Friends will dine together in the Hall of Gonville and Caius College. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice to Dr. P. W. LATHAM, Sidney Street, Cambridge.

Members are requested to enter, immediately on arrival, their names and addresses in the Reception Room at the Guild Hall, when cards will be supplied which will secure admission to all the proceedings.

A Clerk will be in attendance at the Reception

Room, and will give information respecting lodging-houses.

The principal Hotels are the "Bull", the "Eagle", the "Red Lion", the "University Arms", and the "Hoop".

*Return Tickets* to Cambridge from London and such other stations on the Great Eastern and Great Northern Railways, as usually issue them, will be granted to members of the Association producing vouchers on the 2nd, 3rd, 4th, and 5th of August, and will be available up to the 6th inclusive.

Members who wish for vouchers or for information previous to the Meeting, may communicate with Dr. P. W. LATHAM, Sidney Street, Cambridge.

*Notices of Motion.* Dr. STYRAP will move the following alteration in Law xv. To insert, after the words "One Guinea annually", "provided that such sum shall be paid not later than June 30th; after which date, each Member shall pay, in default, £1:5."

Mr. WATKIN WILLIAMS will move to alter Law xv, by inserting "the 1st of December", instead of "the 25th of December."

*Papers* have been promised by Mr. Spencer Wells (London); Mr. Sydney Jones (London); Mr. Bridger (Cottenham); Dr. Sansom (London); Dr. Barker (Bedford); Mr. Solomon (Birmingham); Dr. Woakes (Luton); Dr. Richardson (London); Dr. Martyn (Clifton); Dr. Philipson (Newcastle-on-Tyne); Dr. George Buchanan (Glasgow); Dr. Christison (Edinburgh); Dr. Routh (London); Mr. Erasmus Wilson (London); Dr. B. Squire (London); Dr. Hillier (London).

T. WATKIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, July 1st, 1864.

#### BRANCH MEETINGS TO BE HELD.

| NAME OF BRANCH.             | PLACE OF MEETING.                           | DATE.                                 |
|-----------------------------|---|---------------------------------------|
| READING.<br>[Annual.]       | George Hotel,<br>Reading.                   | We Tuesday, July<br>20th, 4 P.M.      |
| SOUTH-WESTERS.<br>[Annual.] | Torbay and South<br>Devon Club,<br>Torquay. | Wednesday,<br>July 20th,<br>2.30 P.M. |

#### METROPOLITAN COUNTIES BRANCH: DEPUTATION TO H.R.H. THE COMMANDER-IN-CHIEF.

On Saturday last, the 9th inst., a deputation of members of this Branch had an interview at the Horse Guards with His Royal Highness the Duke of Cambridge, Commander-in-Chief of the Army, on the subject of the Army Medical Service. The deputation consisted of Dr. Sibson, F.R.S., President of the Branch; F. C. Skey, Esq., F.R.S., President of the Royal College of Surgeons; C. F. J. Lord, Esq., President-elect, and Dr. B. W. Richardson, Vice-President, of the Branch; R. Barwell, Esq., Assistant-Surgeon to Charing Cross Hospital; Holmes Coote, Esq., Surgeon to St. Bartholomew's Hospital; T. B. Curling, Esq., F.R.S., Surgeon to the London Hospital; Dr. G. Harley, Professor of Medical Jurisprudence in University College; Dr. A. Henry, Joint-Secretary of the Branch; C. Holthouse, Esq., Surgeon to the Westminster Hospital; Dr. Handfield Jones, F.R.S., and Dr. Markham, Physicians to St. Mary's Hospital; William Martin, Esq.; Dr. E. Meryon; Dr. J. W. Ogle, Assistant-Physician to St. George's Hospital; Dr. C. H. F. Routh; and Dr. Stewart, Physician to the Middlesex Hospital and Joint-Secretary of the Branch.

Mr. SKEY introduced the deputation, and expressed, as President of the Royal College of Surgeons, his concurrence in the statements made in the Memorial.

Dr. SIBSON said that many members of the Metropolitan Counties Branch were teachers in the medical schools of the metropolis; and that, therefore, they had had full opportunities of observing the deficiency in the number of candidates for the medical service of the army. Formerly, many of the best informed students in the medical schools used to be desirous to enter the army; now, however, they were reluctant to do so, because they felt that they could not be sure that their treatment would be such as medical officers had a right to expect. Whether this feeling were right or wrong, he would not now say; but it existed among the students. It had not been instilled into them by their teachers, but had been acquired in their intercourse with society outside the schools. The medical teachers had all along been desirous of securing the services of the better educated men for the army; but it had been felt that there was some jealousy on the part of the combatant officers, and hence a denial of the Warrant of 1858, which had given universal satisfaction to the medical profession. Dr. Sibson then read and presented the following memorial.

*To Field-Marshal His Royal Highness the Duke of Cambridge, Commander-in-Chief of Her Majesty's Army,*

*The Memorial of the President and Members of the Metropolitan Counties Branch of the British Medical Association*

HUMBLY SHEWETH—

That the attention of your Memorialists, many of whom are teachers in the Medical Colleges of this metropolis, has been turned for some time to the great and growing deficiency of candidates for the Army Medical Service, and, of late, to the advertisement which has in consequence been issued, inviting gentlemen who are engaged in civil practice to undertake the charge of troops at home; and that the intervention of your Memorialists has been entirely unsolicited by any of Her Majesty's Medical Officers.

That your Memorialists, judging from the unqualified satisfaction which the Warrant of 1858 diffused throughout the Medical Profession, are convinced that the maintenance in its integrity and the steady enforcement of the said Warrant, would have made the Army Medical Service highly attractive to well qualified candidates.

That, on the contrary, the practical neglect of that Warrant by the Executive, and the successive changes made in it during the last three years, have so seriously shaken confidence in the good faith of the military authorities, that desirable candidates have ceased to apply for admission to the Medical Department of the Army.

That the frequent denial of the Precedence granted by the Warrant of 1858, and the modification of Clause 17 by the Warrant of 1863, which lowers the status of the Medical Officer by disqualifying him, even when he is the senior officer present, from presiding at boards, *although on other than purely military matters*, have been the chief sources of dissatisfaction.

That, whereas the two-fold object of the Warrant of 1858 was, by holding out greater inducements to attract the better members of the Medical Profession, and by a stringent examination to exclude the less worthy, the effect of subsequently lessening the inducements has been to discourage Medical Men of high tone and character from entering the Army, while the examination, still properly enforced, forbids the entrance of those who now present themselves, most of whom are of an inferior class. The effect, on the other hand, of



admitting *without examination*, as Acting Assistant-Surgeons, men who have confessedly failed in civil practice, will be to inflict great hardship on the military Medical Officer by increasing indefinitely the period of foreign service, and ultimately to bring the whole Medical Service of the Army into merited contempt.

That your Memorialists, in the interests of the Soldier, for whose welfare the military authorities and the British nation are responsible, would gladly lend their aid in promoting a satisfactory solution of the present difficulties. But they cannot conceal from your Royal Highness, that the question is now much more complicated than in 1858. For, not only have the military authorities to regain lost confidence, but the field of choice is narrowed by the recent considerable decrease in the medical population of the kingdom. In these circumstances, your Memorialists, whilst recognising in the fullest manner the right of Her Majesty to alter from time to time by Warrant the regulations of all departments of Her Majesty's Service, would respectfully but earnestly submit to your Royal Highness the convictions which have been forced on them by a careful consideration of the subject. They can see no prospect of any satisfactory arrangement, without—

1. The full restoration of Clause 17 of the Warrant of 1858, with clear definition of the Precedence of the Medical Officer in accordance with his rank;

2. Some guarantee for the enforcement by the Executive of the Warrants which define the terms under which Medical Men enter the Army; and

3. Some security that principles recognised, and regulations issued, after long and careful deliberation, shall not be modified in their essential features without an inquiry at least as comprehensive as that on which they were originally founded.

Your Memorialists believe that, in order to secure a full supply of eligible candidates, it may now be necessary to make the following additional concessions:—

1. Increased pay of Assistant-Surgeons and Surgeons.

2. Promotion to the rank of Surgeon after, at most, ten years' full-pay service.

3. Optional retirement after twenty years' full-pay service on an adequate pension.

4. Controlling power and free agency to the Medical Officer in his own department, especially in circumstances of emergency.

5. Regular leave for the Medical Officer, and sick leave on the same footing as is granted to all other Officers.

6. Non-deduction of pay for expenses incurred in the execution of his duty.

7. The abolition of the system of confidential reports by the Surgeon on the conduct of the Assistant-Surgeon.

8. The infliction by the military authorities of all punishments ordered by them; the Medical Officer's duty on such occasions being limited to the protection of the soldier from serious injury.

Your Memorialists believe that Your Royal Highness and they are at one, in the earnest desire to obtain for the Medical Service of the Army gentlemen and men of ascertained ability: but they are persuaded that the services of such men will not be obtained until the Medical Officer is upheld by the military authorities, and is permanently placed in that honourable position which is due to himself and to the profession to which he belongs.

May it therefore please Your Royal Highness, with a view to the safety and welfare of the Soldier, to use your high influence to obtain for the Medical Officer the recognition of his just claims; and to enforce by

your authority such regulations, in accordance therewith, as Her Majesty may be graciously pleased to sanction.

Signed on behalf and by authority of the Members of the Metropolitan Counties Branch of the British Medical Association,

FRANCIS SIBSON, M.D., F.R.S., *President.*

A. P. STEWART, M.D., *Secretaries.*

ALEXANDER HENRY, M.D., *Secretaries.*

Dr. SIBSON said, that the memorialists earnestly desired to aid His Royal Highness in securing for the medical department of the army the services of the very best men; and would especially assure His Royal Highness, that the Branch had taken up the matter entirely from their own motion, and not at the instigation of the army medical officers; and that, in fact the information possessed by members of the Branch had been obtained by them with difficulty.

Dr. STEWART produced letters from Dr. Burrows, President of the Medical Council, and Dr. Watson, President of the Royal College of Physicians, expressing regret at their unavoidable absence, and cordially concurring in the statement and objects of the memorial. The object of the memorial itself might be arranged under two heads: 1, certain conditions without which the confidence of the medical profession in the army authorities could not be restored; 2, other proposals regarding some of which there was confessedly a difference of opinion, but which were put forward because, in consequence of the present deficiency of medical candidates for the army, and of the operation of causes which, by their greater attraction, drew away the better members of the profession from the service, it was very probable that it would be necessary to make some additional concessions in the form of increased pay, etc., besides these which were laid down as absolutely essential. But the practical denial of the Warrant of 1858 was the great obstacle to be removed. There could be no doubt that some of those who had entered the medical service of the army had not done credit to their profession, but these were exceptional cases; and unless something were done of the kind suggested in the memorial, there was reason to fear that that which had hitherto been the exception would become the rule. With regard to the presidency of boards, none of the memorialists had the least desire that army medical officers should be entitled to preside over courts-martial, or that they should in any way interfere with military matters; and, indeed, the great mass of the medical officers of the army would scout such an idea. It was also believed, that the application of the term "civil" to the army medical officers was at the bottom of much of the existing difficulty. The army surgeon was as much a combatant officer as other officers; he was equally exposed with them to danger, and received military honours and rewards. Strictly speaking, the soldier was the only "combatant" in her Majesty's army.

THE DUKE OF CAMBRIDGE said that he was very glad to have the opportunity of meeting so many members of the medical profession, for two reasons. First, it was very satisfactory to be able to learn what were the great causes of dissatisfaction with the army medical service, and he hoped to be able to shew that this dissatisfaction was less well grounded than was supposed. He also was glad of having this, the first, opportunity of expressing to the medical profession his annoyance and sorrow that it should be supposed that he, or others connected with the administration of the army, had any desire to depreciate the services of medical men. But, very odd characters were sometimes met with in the army. Early in his military career he had been connected with regiments, and had always found that the

army surgeons were on the best terms with their brother officers. He had never observed any other than the best disposition towards them; in fact, whenever the medical officer was a man that could be respected, he was always looked up to by the others. He (the Duke) would make a few observations on military discipline. It was on the ground of discipline that Clause 17 of the Warrant of 1858 had not been carried out. He was sure that no one wished to place the army medical officer in a false position. He admitted that the army surgeon is to some extent a combatant officer; but he believed, that it was not the desire of the deputation that the surgeon should assume military command if the officers of a regiment senior to him should happen to be killed in action. The supreme command must rest with the senior combatant officer; and it was on this principle that the medical officer was excluded from the presidency of courts-martial and also of other boards, and by no means from any desire to give offence. As regarded the other points in the memorial, most of them were matters of finance, with which he could only deal if his advice were asked by the Secretary of State for War. As for leave of absence, there was no objection, but it was a matter of finance. There must be a medical officer present with a regiment; and no obstacle was ever thrown in the way of leave, provided the performance of the duty were secured. The system of reports he believed to be rather a wholesome regulation. In the army, confidential reports were made on every officer; but no charge was ever made without the officer accused being informed of it; and he believed that the same rule was followed in the army medical service. The operation of branding or marking was in fact tattooing, such as was repeatedly done by sailors; and the only reason why the medical officer was directed to be present, was in order that no cruelty might take place. The proceeding was required for security, as men of bad character were apt to endeavour to be readmitted into the army.

Dr. SIBSON observed that the operation was in reality done by the surgeon, inasmuch as he provided the instruments for the purpose. As to precedence, it was not for a moment desired that the medical officer should preside at courts-martial, or interfere with military command in any way; but there were boards, such as of sanitary inquiry, in which medical men ought to have the opportunity of presiding.

The DUKE OF CAMBRIDGE said that a regiment was analogous to a family; and the commanding officer of the regiment, as the head of the family, was thought to be the proper person to preside at all boards. The matter was entirely one of discipline; it was not that the medical profession was regarded otherwise than kindly and warmly.

Dr. SIBSON replied, that it was not desired to put the medical officer in the place of the senior combatant officer. The Warrant of 1858 gave very complete satisfaction; and he could not understand that military discipline could be interfered with by conceding to medical officers the right of presiding at boards. He could assure His Royal Highness that the better class of medical men would not apply for admission into the army until the Warrant of 1858 was renewed; and he would earnestly beg him to endeavour to divest himself of his purely military nature, and to take the matter into his most serious consideration, on other grounds than that of discipline.

Dr. MARKHAM would refer to some things of which the army surgeons complained, that were not alluded to in the Memorial, and of which probably his Royal Highness was not aware. He then recapitulated the alleged grievances which were enumerated in the JOURNAL for June 18th (p. 668); and inquired

to whom the profession must look for the placing of matters in a proper position.

The DUKE OF CAMBRIDGE said that many of the points referred to were matters of finance. A certain sum of money was placed at the disposal of the army authorities; and they must apportion it as well as they could. He was willing to do all he could for the medical officers; but he begged the members of the deputation to instil into the minds of students that there was no feeling in the army against the medical profession.

The deputation, having thanked His Royal Highness, then withdrew.

#### DEPUTATION TO THE DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT.

On Monday last, a deputation, consisting of Dr. Sibson, F.R.S., President of the Metropolitan Counties Branch, R. Dunn, Esq., Dr. Henry, C. F. J. Lord, Esq., Dr. Markham, W. Martin, Esq., Dr. Richardson, Dr. Routh, and Dr. Stewart, had an interview with Dr. Gibson, C.B., Director-General of the Army Medical Department.

Dr. SIBSON presented to the Director-General a memorial from the Metropolitan Counties Branch.

The memorial was similar to that presented to H.R.H. the Commander-in-Chief, with the following alterations.

For the sixth paragraph there was substituted—

"That your Memorialists, in the interest of the Soldier, for whose welfare the military authorities and the British nation are responsible, would gladly lend their aid in promoting a satisfactory solution of the present difficulties. But it must be known to you, as well as to them, that the question is much more complicated than in 1858. For, not only have the military authorities to regain lost confidence, but the field of choice is narrowed by the recent considerable decrease in the medical population of the kingdom; yet not so narrowed as to interfere with an adequate supply of candidates for the Navy Medical Service, which has always been less popular than that of the army, where the vacancies are very numerous. Such being the present very serious posture of affairs, your Memorialists see no prospect of any satisfactory arrangement without," etc.

The last two paragraphs were altered as follows.

"Your Memorialists believe that it is your wish, as it is theirs, to obtain a better position for the Medical Officers of the Army, and a steady supply of gentlemen and men of ascertained ability as candidates; but they are persuaded that the services of such men will not be obtained until the Medical Officer is upheld by the military authorities, and is permanently placed in that honourable position which is due to himself and to the profession to which he belongs. And they are happy to believe that you will welcome the support and countenance of your brethren engaged in civil practice, as likely to strengthen your hands and to give increased weight to the remonstrances you may feel it your duty to make to the Heads of other Departments of Her Majesty's Army.

"They would, therefore, earnestly urge upon you the importance, with a view to the welfare both of the Soldier and of the Medical Officer, of representing to the Right Hon. the Secretary for War and H.R.H. the Commander-in-Chief, the absolute necessity of restoring in its integrity the Warrant of 1858, which its framers did not consider likely in any way to interfere with discipline—an anticipation which was substantially confirmed during the period of its operation. They would also earnestly request you to take steps in your own Department to relieve the Medical Officer from the pressure which has seriously ham-



pered him in the discharge of his duties, and so often deprived the sick Soldier of his proper medical comforts."

Dr. Sibson said that the deputation felt that to the Director-General was confided the immediate management of that important branch of the public service, the Army Medical Department; and that their desire was to give him support and countenance. Of course, in some matters he (the Director-General) could do no more than give advice; but the Secretary of State for War and the Commander-in-Chief would therefore of necessity apply to him, and great weight would be attached to anything that he might say; so that, most probably, to the position assumed by him would be due the condition of the army surgeons. He would not go over the various points touched on in the memorial, but would mention that sedulous care had been taken to exclude all observations on the Director-General's special department. The deputation hoped to have his aid in redressing the grievances which had prevented medical men from coming forward for the medical service of the army.

Dr. STEWART said it was important, in the first place, to state that this intervention had not originated with the army medical officers; but that he and other members of the profession in civil practice had thought it might be useful to make some stir in the matter. It was generally believed that there were about two hundred vacancies in the British and Indian army; and this supposition was confirmed by the recent issue of what he must term a most extraordinary and ill-advised advertisement, which would do much to deter good men from entering the army. The Metropolitan Counties Branch contained many teachers in the London medical schools; and, he could state that none of these would advise young men entering the profession to go into the army. He believed that there were now, lying at the University of London, commissions which no one could be persuaded to take. The restoration of the Warrant of 1858 was a matter on which no concession nor compromise could be accepted. There were indeed points of army discipline with which those belonging to the civil departments would rightly take no part—such as the presidency of courts-martial; but, he believed, medical men could not be made to understand that discipline would prevent medical officers from being presidents of boards on the state of barracks, hospitals, etc., and even of boards of survey, on account of their knowledge of natural science. So far from the medical officer being out of his place on such boards, he ought to be placed on them; and not in an inferior position, but as president if actually senior in rank. The great object of the deputation was to point out that the abrogation of the Warrant of 1858 was the grand reason of the dissatisfaction with the army medical service. As to interference with the Royal prerogative, he would say that, so far as he could see, the only persons who interfered with Her Majesty's prerogative were those who declined to carry out the Warrant.

The DIRECTOR-GENERAL said that the deputation had but done him justice in believing that he desired to promote the welfare of the army medical officers. He had also always desired to cultivate the acquaintance of his brethren in various places, wherever he might be. Much had been said in the journals and among the profession regarding the army medical service; but, in his situation and as a point of etiquette, such statements were never contradicted publicly. As to himself, he had been told that the general feeling was that he had not properly supported the department, and that all the grievances complained of had occurred since he became Director-General. The right of presiding at courts had been

granted to army medical officers by the Warrant of October 1858; but Clause 17 had been abrogated by a General Order in December of the same year, directing that medical men should not be members of boards. (Dr. Gibson produced official documents in support of his statements.) This had occurred before he became Director-General. In 1861, the warrant was issued which gave the surgeon the rank of junior major. Great pressure had been put on him to have the surgeons reinstated in their former position. He had not remonstrated; because, if he had done so, and that warrant had in consequence been withdrawn, the matter would have been shut up for ever; whereas, by leaving it as it then was, he saw that the restoration of their privileges was only a question of time. And so it turned out; for, in 1863, they were reinstated in their former position, with the exception of the presidency of boards and committees. The army surgeons, therefore, were in a better position than when he took office. As to the operation of marking, it was not done by the medical officer.

Dr. STEWART: But he provides the instruments for the purpose.

The DIRECTOR-GENERAL said that the instruments were provided at the public expense.

Dr. STEWART: The medical officer is the only officer who is present at the infliction of the punishment.

Dr. SIBSON: We wish the surgeon to be present, to prevent serious injury to the soldier; and also a military officer to superintend the infliction of the punishment.

Dr. STEWART observed that, in flogging, a military officer stood by to superintend.

Dr. MARKHAM: If the branded men died, of erysipelas for instance, on whom would the responsibility fall?

The DIRECTOR-GENERAL: On the hospital-sergeant who performed the marking. But, as regarded the state of the man's health when the punishment was inflicted, the surgeon was responsible.

Dr. SIBSON said that the marking question appeared only a small matter; but it had much influence with students in preventing them from entering the army.

The DIRECTOR-GENERAL: Would it be satisfactory if the orderly officer of the day were always present on such occasions?

The deputation assented.

The DIRECTOR-GENERAL, referring to the presidency of boards, said that this involved military command. Medical officers were not accustomed to sit in courts-martial and military boards, for which a special aptitude was required. In presiding over such boards, the medical officer would be placed in a position of command, in which it might be necessary for him to order the arrest of one of the other members; and this was equally the case in sanitary as in other boards. It was found soon after the Warrant of 1858 that inconvenience arose from the position of the civil officers on boards; and hence the withdrawal of Clause 17. The Queen's regulations provided that the senior combatant officer should preside at such boards. As to mess, the medical officers became presidents in their turn.

Dr. STEWART said that the remarks made by Dr. Gibson opened up an important question, viz., whether the medical service of the army should be formed into a scientific military corps. The application of the term "civilians" to the army medical officers was strongly objected to; and, he believed, the objection was so strong that medical men would not enter the army unless they could be placed in a position which would allow them to become presidents of certain boards.

The DIRECTOR-GENERAL said that it had occurred

to him that it might be advantageous to form the army medical officers into a scientific corps. They would be thereby removed from the bottom of the list of regimental officers; and any objection arising from difference of uniform would be obviated. Again, under the present system, the army medical officers were put to much expense by frequent exchanges; as when a surgeon is obliged to return from India, on account of his health, he is placed on the staff. The formation of a scientific corps would obviate all this; but the feeling of the medical officers themselves was strong against the proposition. He had been told that they would consider themselves degraded. At present, he believed, there was a little feeling among them in favour of the change; but not enough to warrant him in recommending it. He believed that the examinations did much to prevent men from entering the army. It was scarcely fair to expect superior men to enter the army in large numbers.

Dr. STEWART. They did enter the Indian army.

Dr. SIBSON said it was perfectly clear that the Director General had no concern with the withdrawal of clause 17 of the Warrant of 1838; but, on looking through the memorial, he would find that no blame had anywhere been attached to him. The memorialists considered that the injustice had been done by the military executive. He believed that the issue of the Order of December 1858, abrogating clause 17 of the Warrant, was a direct breach of the royal prerogative. As to the statement that the better educated men could not be expected to enter the army, St. Mary's Hospital always used to send its best men; but now it did not do so. He would ask whether there were not boards of sanitary inquiry, in which the medical officer might take a part? In Napoleon's army, the mixed boards formed by Baron Larrey, of medical and military officers, were found highly advantageous. As to the presidency of boards it was only asked that the medical officer should preside, if he was the senior officer present. He hoped this would be well placed before H.R.H. the Commander-in-Chief. The memorialists strongly approved of the existing system of examinations, and of the mode in which they were carried on.

The DIRECTOR-GENERAL said the medical officers of the army all acquitted themselves well, wherever they were placed; this was shewn by the reception by many of them of the Victoria Cross, which was not given by favour. Their contributions to the Army Reports also shewed them to possess great attainments.

Dr. RICHARDSON said he had come into contact with many medical men in the provinces, and had found the expression of professional feeling (whether right or wrong, he would not say) against entering the army as strong as in London. With regard to the alleged deficiency of first-class men, arising from keeping up the present standard of examination, he would say that, even if there should be a deficiency, and an attempt were made to fill it by means of such an advertisement as that lately issued, the supply would soon fail. Unless some inducements were held out, which men of good attainments would grasp at, the deficiency would go on increasing, through the decrease of the medical population of the kingdom, even though the very worst men were taken to fill vacancies. The grievances complained of in the memorial had been all admitted to exist by the Director-General. He would earnestly recommend to the Director-General an analysis of the medical profession in proportion to the population.

Dr. MARKHAM would be glad if he could have the opportunity of putting right any statements that had been incorrectly made in the medical press, so far as he

was connected with it. Statements had been made to him, on what he believed to be undoubted authority; and he had mentioned certain grievances to H.R.H. the Commander-in-Chief. He would now ask whether they were facts; viz., the reduction of the money grant to the Army Medical Department; the confidential reports; the want of proper leave; etc. He had been told that, in consequence of the difficulties thrown in their way, many surgeons of regiments followed out the reduction of extras for the sick so minutely as to order none.

The DIRECTOR-GENERAL said that the present men entering the army, though not first class men, were not inferior; the examination secured good third class men. As to the acting assistant-surgeons, this was a measure that would be resorted to for only a few months; those who had been selected out of three hundred who had applied, had been sent to depôts, where there were already army medical officers. Regarding the reduction of expenditure, he produced a diet-table, which, he said, was so framed as to enable the medical officer to meet every case; and much of the reduction had arisen from the utilisation of the stores returned from the China war. When extras were ordered, brief reports of cases only were required. As to confidential reports, the word "confidential" was simply used to prevent the documents from being laid where they might be seen by everybody. It was important that he should know the characters of the assistant-surgeons, and the special attainments which any of them possessed, that he might employ them accordingly. He could not gain this information accurately, except through the surgeons. If a surgeon spoke unfavourably of the assistant-surgeon, the latter was invariably written to and advised by the Director-General.

Dr. SIBSON believed that many surgeons objected to make the confidential reports; but he thought the objections would be removed if the assistant-surgeons were allowed to see the reports.

The DIRECTOR-GENERAL said that the assistant-surgeons could see the reports before they were sent. Regimental surgeons in India were not prevented from exchanging in the same way as other surgeons. The question of sick leave was a very important one. There were about thirty combatant, and two medical officers (in India, formerly two but now three), in each regiment. Of course, the duty of any one of the thirty combatant officers could be performed without inconvenience during his absence; but it was not so with the medical officers. The case would be different, if six assistant-surgeons could be allowed to each regiment.

Dr. STEWART said that the period of sick leave allowed to the medical officer was often very insufficient for the recovery of his health.

The DIRECTOR-GENERAL said that army medical officers were allowed a sick leave of from nine to twelve months before being placed on half-pay. As to the alleged slowness of promotion, there were at present no assistant-surgeons of more than eleven years' service.

Dr. RICHARDSON would ask whether it was to be understood that the Director-General would not draw further on the three hundred who had applied for the post of acting assistant-surgeons, if the present deficiency continued.

The DIRECTOR-GENERAL replied, that he held himself at liberty to employ as many of them as might be necessary to carry on Her Majesty's service.

The deputation then withdrew.



## EAST ANGLIAN BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the General Hospital, Bury St. Edmunds, on Friday, June 17th; W. E. IMAGE, Esq., President, in the chair. There were also present: Drs. Chevallier (Ipswich); W. Cooper (Bury St. Edmunds); C. M. Durrant (Ipswich); Goodwin (Bury St. Edmunds); Pitt (Norwich); J. Williams (Bury St. Edmunds); and Messrs. F. T. Barkway (Lavenham); W. Ebdon (Haughley); R. Faircloth (Newmarket); H. Fuller (Bury St. Edmunds); Fyson (Newmarket); G. J. Hinnell (Bury St. Edmunds); R. E. Jones (Long Malford); J. Kilner (Bury St. Edmunds); B. F. Matthews (Norton); and H. Taylor (Ixworth).

*New Members.* The following gentlemen were elected members: F. T. Barkway, Esq.; G. W. W. Firth, Esq. (Norwich); H. Fuller, Esq.; G. J. Hinnell, Esq.; B. F. Matthews, Esq.; H. Taylor, Esq.; and J. Williams, M.D.

*President's Address.* The President delivered an address, which will be published in the JOURNAL.

*Resolutions.* The following resolutions were unanimously carried:

"1. That the thanks of this meeting be given to Dr. Copeman for his able services as President during the past year."

"2. That A. H. Bartlett, M.D., be the President-elect; and that the next annual meeting be held at Ipswich."

"3. That the following members be added to the Council of the Branch: E. Copeman, M.D.; T. W. Crosse, Esq.; J. S. Gissing, Esq.; J. W. Goodwin, M.D.; R. Growse, Esq.; R. E. Jones, Esq.; W. W. Miller, Esq."

"4. That the following members be the Representatives of the Branch in the General Council: W. Cadge, Esq.; E. Copeman, M.D.; R. Faircloth, Esq.; W. E. Image, Esq.; J. Kirkman, M.D.; and B. Chevallier, M.D., *Honorary Secretary.*"

*Papers.* The following papers were read.

1. Circumscribed or Suppurative Inflammation of the Liver. By J. W. Goodwin, M.D.

2. Cases of Embolism. By C. M. Durrant, M.D.

3. Cases selected from Practice. By W. Cooper, M.D. I. Retention of Urine of some years' duration; II. Impacted Gall-Bladder and Ducts; III. Severe Hæmorrhage of doubtful source. The patient suffering from hæmorrhage was subsequently introduced to the meeting, and carefully examined; but no decided diagnosis was arrived at.

4. Some interesting Pathological Specimens of recent occurrence were also brought under the notice of the members, and led to much discussion.

*The Army Medical Service.* At the instance of the Metropolitan Counties Branch, the present position of the Army Medical Department was taken into consideration; and the resolutions passed at their late special general meeting on the subject were approved of.

*Provident Fund.* A communication was read from Mr. Gorham respecting the establishment of a society in connexion with the British Medical Association, to provide annuities for all members of the profession upon attaining the age of sixty years and upwards; but time did not permit a full discussion of this confessedly important subject.

*Dinner.* The members afterwards dined together at the Angel Hotel, reinforced by some friends, who had been unable to take a part in the more scientific proceedings of the day; and it need hardly be added that the evening was spent most harmoniously.

## Reports of Societies.

## OBSTETRICAL SOCIETY OF LONDON.

APRIL 6TH, 1864.

H. OLDHAM, M.D., President, in the Chair.

FOUR gentlemen were elected Fellows.

*Ovarian Tumour.* Dr. OLDHAM exhibited an ovarian tumour removed from a lady under his care by Mr. Spencer Wells.

*Simple Hypertrophy of the Cervix Uteri.* Dr. GREEN-HALGH exhibited a specimen removed by the wire-rope écraseur.

*Dr. Braun's Cephalotribe and Perforator.* Dr. RITCHIE exhibited these and described the mode of using them.

Dr. BARNES considered it an objection to the perforator that it required two to work it, and was complicated. He thought the cephalotribe of Dr. Braun better than the French, and that the instrument had been perhaps too much overlooked in this country.

Dr. GRAILY HEWITT shewed a cephalotribe from Paris, used by Pajot, which he considered more simple than Braun's.

SPONDYLOLISTHESIS: WITH AN ACCOUNT OF A CASE OF PELVIC CONTRACTION, IN WHICH PREMATURE LABOUR WAS INDUCED BY THE AUTHOR'S METHOD. BY ROBERT BARNES, M.D.

The memoir embraced a history of the literature of this affection and a summary of the cases hitherto recorded. It was first described in 1853 by Kilian, who defined it as a slipping downwards and forwards of the last lumbar vertebra upon the sacrum, so that one or more of the lumbar vertebrae fell into the cavity of the pelvis, encroaching upon the space required in labour. In several cases the Cæsarean section had been necessary in order to deliver. The author added a case in which he believed this form of distortion was the cause of difficult labour. A woman, previously healthy, had been injured in the back. Considerable contraction of the pelvic brim followed. There was a marked depression in the lumbar region, and a projection internally above the promontory of the sacrum. Dr. BARNES brought on labour by his method at about the eighth month. The child was extracted by turning with some difficulty, still-born. The entire labour occupied less than five hours. The mother recovered. The remainder of the memoir was devoted to the discussion of the causes of the deformity, concerning which very conflicting views were entertained in Germany.

Mr. W. ADAMS had listened to the paper with great interest, as the vertebral deformity or displacement described was but little known, and required further investigation. It seemed to him that the condition described as spondylolisthesis might depend upon several causes. Rickets might give rise to it; but this would be at once apparent by the general evidences of rickets in the development of the skeleton, distortion of the legs, etc. Caries of the first sacral bone might give rise to it; and some years after destructive disease had ceased, and ankylosis had been produced, the prominence forward of the last lumbar vertebra might encroach considerably on the pelvic cavity. Mr. Adams had seen a few examples of this, and had one now under his care at the Orthopædic Hospital. In this case the girl presented extreme lordosis in the lumbar region, with corresponding projection of the stomach, and a sharp posterior angular prominence corresponding to the first and second sacral bones. In all probability this girl, now twenty-one years of age, could never have a living child, in

consequence of the projection of the last lumbar vertebra into the pelvic cavity. Congenital dislocation of both hip-joints produces extreme lordosis in the lumbar region, and, therefore, would probably give rise to the condition described as spondylolisthesis; and Mr. Adams had also seen it produced to some extent by a sharp rotation movement, and lateral distortion affecting the lower lumbar vertebrae, as in a case described by him in the *Medico-Chirurgical Transactions*, vol. xxxvii. It was evident that a variety of causes might produce the vertebral displacement mentioned by Dr. Barnes, whose analysis of the cases recorded in the paper would form the basis of further observation of the subject.

Mr. BRODIE considered that the affection in question was not a true dislocation; and that it differed materially from ordinary lordosis, and from those forms of lordosis which are produced by congenital dislocations of the heads of the thigh-bones by some very rare forms of caries of the bodies of the vertebrae, etc.; but it was induced, he said, by softening of the bodies of the vertebrae, and especially by softening and yielding of the ligaments which unite the lumbar vertebrae and the sacrum. Thus was occasioned some displacement of the bodies of the lumbar vertebrae downwards. The positions of the spinous processes showed that caries was not the cause of this affection, as had been suggested, and a section of the bodies of the vertebrae showed this fact more clearly. He contended that this condition was due to rachitic inflammation and softening of the osseous and ligamentous structures.

Dr. BARNES had felt the want of a more extended practical knowledge of diseases of the bones than he possessed, and was therefore glad to have the assistance of Mr. Adams in discussing it. He was quite prepared to believe that caries of the upper part of the sacrum might cause the deformity. It was one cause, and did not exclude the possibility of other causes; nor did he gather from Mr. Adams's observations that that gentleman regarded caries as the sole cause. The case of the child figured by Robert, of Coblenz, was not an undoubted case of spondylolisthesis; and he was much interested in the suggestion of Mr. Adams, that the deformity was probably due to disease of the hip-joints, causing extreme lordosis of the lumbar vertebrae, without dislocation. He wished it to be borne in mind that this deformity consisted in a real slipping down of the fifth lumbar vertebra from the sacrum. It was a true dislocation, and not simply a curvature of the spine. It was seen quite independently of rickets. It caused serious obstruction to labour, even in cases where the pelvis itself was free from distortion. He believed that this and other vertebral deformities possessed a great obstetric interest, and would when more attention was directed to the subject receive further illustration.

**MORTALITY IN LONDON.** In the thirteen weeks ending July 2nd, the mortality in London was high; the deaths were 17,346. The mean temperature of the air was 53.5°. There were 2,798 deaths from diseases of the respiratory organs. The mortality from zymotic diseases was also high; it included 4,325 deaths, of which 116 were from small-pox, 844 from measles, 593 from scarlatina, 143 from diphtheria, 198 from croup, 639 from whooping-cough, 783 from typhus, 321 from diarrhoea. Measles was the most fatal epidemic disease of the season, and next to it typhus. Of 616 violent deaths, 510 were by accident or negligence, 30 by homicide, 75 by suicide, and one by public execution. Of 2,919 deaths in public institutions, 1,555 were in workhouses, 34 in prisons, 75 in military and naval asylums, 1,181 in hospitals, and 74 in lunatic asylums.

## Correspondence.

### THE EXAMINERSHIPS IN THE ROYAL COLLEGE OF SURGEONS.

LETTER FROM THOMAS PAGET, ESQ.

SIR,—A leader in your last number urges me to notify on Thursday to the Council of our College that I "will, at its first meeting in October, bring under its consideration the present constitution of the Court of Examiners, with a view to its alteration."

I am ready to move in any direction that may seem likely to lead to an improvement in the "College management", and quite assent that it is unwise to retain the stunted range whence Examiners have hitherto been elected. But before taking any such step as the one suggested, I would invite you to calculate with me the chance of doing good by the movement.

Is it not from a body in the Council, entirely independent of all prospect of the Examinership, that we must look for support in the effort you propose to make? There are now, I cannot doubt, members who, for the good of the profession and its College, are ready to forego office, or the chance of it in future; but, with all "the loud sound" any notice might make, must we not look for substantial support, in any reform of the Court, to a body in the Council wholly out of the category of Examiners, actual, probable, or possible? in short, to members whose distant residence and practice, though admitting attendance at Council once, or oftener, in the month, quite preclude them from accepting the Examinership with its almost daily duty.

I would submit, then, that we are driven to wind up our calculation of chance of present change by a conclusion that, until the body of Fellows shew a higher appreciation of the value of an influential provincial component of the Council, any attempt at alteration in the constitution of the Court of Examiners would be simply a Quixotic exploit, damaging in effect to the object it would promote.

I am, etc.,

THOMAS PAGET.

Leicester July 12, 1864.

[We are most pleased to find that Mr. Paget's views are exactly our own touching existing abuses in the Council of the College; but we must totally differ from his opinion that the attempt of altering the constitution of the Court of Examiners under existing circumstances is Quixotic. We will venture to prophesy that professional opinion alone, echoed through the press, will sooner or later work reform there. Deeply, however, we must confess, is the remissness of the country Fellows at the late election to be lamented. EDITOR.]

### CORONERS' FEES FOR INQUESTS ON PAUPER PATIENTS.

SIR,—Seeing the report in your impression of June 25th of the case of *Manley v. Hooper* in the County Court of Oldbury, I am induced to ask your opinion as to how far you think it agrees with a case that happened recently to myself.

I was struck with its similarity, in being charged by a jury with neglect in not forcing a nurse upon a pauper patient under my care, contrary to the wish of the latter expressed to me, as she had a relative who



came daily to render her assistance, and her husband was at home with her at night (they lived in one room.) From the evidence adduced at the inquest, it was admitted that no blame attached to me.

The inquest was adjourned for the purpose of having my evidence; and, after attending to the coroner's summons, I on the following morning called upon him for my fee. He told me "there was no fee for me, as I was summoned on the inquest to clear myself of the charge of neglect." The summons was not according to the prescribed form for a medical witness (nor was Mr. Manley's), although it required that I should attend and give evidence touching the cause of death of the deceased, and at the same time bring counterfoils of all orders given by me upon the relieving officer for extras for her. I was sworn, and gave evidence accordingly, stating my opinion as to the cause of her decease.

Since seeing the report of Mr. Manley's case, I have called again on the coroner, who, while repeating his former opinion as to my right to the fee, apparently shelters himself under the excuse that as his accounts have all been passed he is not in a position to allow it. He has further told me that medical officers of public institutions have no right to claim fees for attendance at inquests; that although in many cases he allowed them, mine he considered an exception.

On looking over the portions of the Act of Parliament relating to the payment of medical witnesses in the Coroners' Court, I find that hospital and dispensary medical officers are not entitled to fees at inquests in respect of cases in connection with those appointments, but I cannot discover that cases under the Poor-Law are included.

The question I desire to ask is, whether, as a district surgeon under the Poor-Law, I can claim a fee for attendance at an inquest held on a pauper patient who dies under my care, when summoned to do so by the coroner?

If you confirm my opinion, I shall adopt the same plan as Mr. Manley did for its recovery. I enclose my card, and am etc.,

A SUBSCRIBER.

Plymouth, July 2nd, 1864.

P.S. I enclose the report of the adjourned inquest, and the editor's disavowal of the seeming charge of neglect, which completely exonerates me from all blame.

[We should advise our correspondent by all means to follow the course pursued by Mr. Manley. We have no doubt that the verdict of a county court judge would be the same in his case, as it was in that of Mr. Manley. EDITOR.]

SMALL-POX is very prevalent at Stafford.

BRITISH MUSEUM. In the House of Commons, on Monday, July 11th, Mr. Walpole, in proposing the vote for the British Museum, said the increase of £1,486 might be accounted for chiefly by two special purchases which have been made. The first of these was the purchase of the collection recently found in a cave in the south of France, and brought here under the superintendence of Professor Owen. He looked upon that as one of the most valuable acquisitions that could have been gained for the benefit of the country at large. For that collection £1,000 had been given. The other purchase was a bronze lamp, found on the site of Julian's Palace. It was supposed to be of Greek workmanship, of a date prior to the Christian era. It was of most beautiful workmanship, and a description of it would be found in the last number of the *Journal of Science and Art*.

## Medical News.

### DEATHS.

\*BRAD, James, M.D., late Physician-General to the Bombay Medical Board, at Fern Acre Lodge, Gerrard's Cross, Bucks, aged 67, on July 10.

DAVISON. On May 16th, at Mazonmalle, near Jaffna, aged 38, Robert William, eldest son of Alexander Davison, M.D., Inspector-General of Hospitals.

PARLIAMENTARY VOTES. The sum of £19,704 was on Monday last voted to the Scottish Universities, £2,462 to the Queen's University in Ireland, and £5,400 to the Queen's Colleges in Ireland.

MR. HENRY THOMPSON has received from the King of the Belgians the flattering distinction of the Cross of the Order of Leopold, and the title of "Surgeon Extraordinary to His Majesty". Mr. Thompson may certainly boast of a great surgical triumph in the case of the King. More than a year has elapsed, we learn, since the operation was performed; and there is no return of the symptoms; and His Majesty's health remains excellent.

THE FIRE AT QUEEN'S COLLEGE, CORK. On Monday, when the vote of money to the Queen's College was proposed, Mr. Hennessy asked for some information with regard to the fire at Queen's College, Cork. Sir R. Peel was happy to be able to inform the committee that the accusations made some time since with regard to Cork University had been cleared up. Dr. Bullen had written a handsome letter of apology, and he trusted the matter would be allowed to rest. Mr. Hennessy said it was a remarkable fact that all the investigations into the matter had been conducted with closed doors. He had heard a rumour which might account for the whole occurrence. A man of the name of Burke was at that time in Clonmel Gaol, awaiting his trial on a charge of having poisoned his wife. A portion of the viscera of that wife had been sent to the Cork College; and it was supposed that the friends of Burke were under the impression that those remains were lying in that part of the building which had been burnt down. It was further stated, that a young woman who was attached to Burke, and to whom he was to have been married after the death of his wife, had arrived in Cork shortly before the day when the fire broke out; and the conclusion drawn from all these facts was, that she or some other friend of Burke had probably bribed one of the officers of the college to destroy the building, and with it one of the evidences of his crime. Sir R. Peel said that that rumour had reached the Irish government, but they had no means of ascertaining whether or not it had any foundation in reality.

THE LATE PROFESSOR MILLER. For several years past, Mr. Miller's friends have observed with distress that his fine face and manly figure were not as once they were and should still have been; that his expression was often haggard and exhausted; and that he was yielding gradually to the continued strain of overwork. Of this he himself frequently admitted the truth, and he wisely allowed himself longer periods of summer holiday than had been his wont. But although he thus far took proper care of his health, he continued to abnegate the use of stimulants to a degree which many of his friends thought prejudicial to him. He would not consent to become a habitual drinker of wine on any terms. Whether this was a just decision in the case of a man who had for the greater part of his life used stimulants moderately, and who had far

too much and too anxious occupation of body and mind, we shall not here attempt to decide. So great also was his devotion to the advancement of religion and of social ameliorations, that he was undoubtedly, and often not in ignorance, led to add to his strictly medical engagements a very great amount of business and hard work, more than any ordinary man can continue to bear. And he was not a strong man; he had been treated for pericarditis by Dr. Abercrombie; he had an almost constant but varying dyspepsia; he had frequent slight attacks of gout, which he inherited from his father; and he had some ten years before his death contracted, by a prick of his bistoury, an infection which could not but add materially to his other sources of weakness. Latterly, he became increasingly dyspeptic; then he grew decidedly hypochondriacal; from gay he became gloomy. This state of mind about a fortnight before his death greatly deepened; active disease of the brain showed itself passing on to a state of imperfect coma, in which he continued till the last. Only in his last hours he was able, with a clear mind, to bid his family an affectionate adieu. He died at the age of fifty-two.

**ROYAL COLLEGE OF SURGEONS.** A meeting of Fellows favourable to an alteration in the mode of conducting the election of members of the Council of the College was held at the Freemasons' Tavern on July 7th; **GEORGE SOUTHAM, Esq.,** of Manchester, in the Chair. The following resolutions were unanimously agreed to. 1. Moved by **MR. LUND**, of Manchester, seconded by **MR. J. Z. LAURENCE**, of London—"That whereas, under the present charter of the Royal College of Surgeons of England, it is directed, in the election of Fellows as members of the Council of the said College, that the election shall be conducted by personal voting; and whereas there are upwards of twelve hundred Fellows of the said College, of which upwards of seven hundred reside in the provinces, a large proportion of whom are prevented from recording their votes at each election,—it is expedient that a supplementary charter be obtained, by which those who reside beyond a certain distance from the College shall be allowed to vote by means of voting-papers properly authenticated." 2. Moved by **MR. MELLOR**, of Manchester, seconded by **MR. DAGLEISH**, of Wigan—"That the foregoing resolution be forwarded to the Council of the Royal College of Surgeons; and that the following gentlemen, viz., **Mr. Southam (Manchester), Dr. Hatton (Belvedere), Mr. Mellor (Manchester), Mr. Wraith (Over Darwen), Dr. Bates (Manchester), Mr. J. Z. Laurence (London), Mr. Dagleish (Wigan), Mr. Lund (Manchester), Mr. Martin (Hammersmith),** and **Dr. Morris (Spalding),** be appointed a committee, with power to add to their number, to assist in carrying out the same in any way which they may deem most desirable. 3. Moved by **MR. LUND**, and seconded by **MR. DAGLEISH**—"That **Dr. Hatton, of Belvedere, North Kent,** be requested to act as Honorary Secretary to the committee."

**MR. TURNER ON THE ROYAL COLLEGE OF SURGEONS.** At the annual dinner of the Fellows on July 7th, **Mr. Turner** of Manchester, on his health being proposed by **Mr. Le Gros Clark**, in connection with provincial schools, replied to the following effect. He thanked the London Fellows on behalf of the provincial Fellows for the kind manner in which they had responded to the toast proposed, and thanked the proposer for having so courteously spoken of him (**Mr. Turner** personally.) He stated that upon that occasion their positions were different. **Mr. Clark** having been the successful candidate for the councillorship, whilst he (**Mr. Turner**) was unsuccessful; but although conquered, he was not cast down, and, if called upon to

defend himself in speech, he would not use the words of bitterness, nor if called upon to write, would he dip his pen in gall, but in the milk of human kindness. Rivalry is a part of the battle of life; and if conducted honourably the result must be submitted to. **Mr. Turner** alluded in unmistakable language to the disadvantageous position of the provincial in comparison with the London Fellows; and warmly referred to the necessity of facilitating the admission of Fellows upon other terms than those requiring a long residence in London after becoming a member of the college—terms which cannot in many cases be complied with. He dwelt on the necessity of progress in privileges in the ratio of the increasing intelligence of the profession. To stand still is, he said, to retrograde. The chairman had alluded in his speech to the state of medical associations a century ago, and compared them with their condition at the present time. Taking up this line of argument, **Mr. Turner** asked what was the state of the College of Surgeons one hundred years ago? Our predecessors were "barber-surgeons"; and barber-surgeons we should have remained, had not knowledge advanced and privileges been ceded to the college. In the analysis made of the different candidates for the councillorship, he had been announced as a reformer. And so he was in the virtuous and legitimate meaning of the appellation; but he contended that reform and conservatism must go hand in hand. He was an advocate for progress; not consisting in violent and sudden changes, but in such progressive alterations in the statistics, and in the machinery by which they were worked as would meet the circumstances of the times, the growing intelligence of the people, the dignity of our profession, and the urgent demands of justice.

## TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

**F. A.**—We have much pleasure in informing our correspondent, that **Dr. C. R. Drysdale** is not the gentleman mentioned in the advertisement of "*The British Journal of Homoeopathy*," edited by **Dr. Drysdale, Dudgeon, and Hughes.**"

**M.B. M.A.**—We are sorry to say that we can see no hope of any redress in the case, except what may be obtained through a court of law. The bowels of mercy, and of justice too, are not characteristics of Poor-law government.

**THE PROPOSED PROVIDENT FUND.**—A correspondent writes: "A rumour is afloat, that it is under the consideration of the British Medical Association to form a Provident Fund, which would give relief to its members in time of sickness. The accomplishment of the object would be a practical inducement to join your ranks, which I and many others have never felt before."

[The establishing of such a fund has been contemplated and seriously taken into consideration. The surest way for the carrying out of the project is, that those gentlemen who are particularly anxious for it, should join our ranks, and then use the influence of the Association for the purpose. Our correspondent may be sure that he and his friends will meet with the warmest sympathy of the Association in this matter. EDITOR.]

**GRIFFIN TESTIMONIAL FUND.**—**SIR:** The following subscriptions have been further received on behalf of the above Fund:—**Henry Ewen, Esq. (Wisbeach), 10s.; A. B. Ewen, Esq. (Wisbeach), 10s.; J. Smart, Esq. (Bethnal Green), £1:1; Robert Cuff, Esq. (Hobborn), 10s. 6d.; John Blundell, Esq. (St. Helen's, Lancashire), £1; J. Bryant, Esq. (Clerkenwell), 5s.; Dr. W. Garstang (Blackburn), 10s.; Robert Lamb, Esq. (Islington), 5s. R. W. Watkins, Esq. (Towcester), 10s. 6d.; Dr. J. T. Barrett (Ashton-under-Lyne), 10s.; S. E. Piper, Esq. (Darlington), £1:1; A. D. Harston, Esq. (Islington), £1:1; Dr. J. Rogers (Strand), £1:1; Dr. Whitman (Putney), 10s. 6d.; Dr. G. E. Nicholas (Wandsworth), 10s. 6d.**

Amount previously announced, £7:2.

I am, etc., **ROBERT FOWLER, M.D.,**  
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, July 13th, 1864.



# Abstract of Lectures

ON THE

## PROGRESS OF SURGERY DURING THE PRESENT CENTURY.

*Delivered at the Royal College of Surgeons.*

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A.Cantab.]

## LECTURE IV.

MR. FERGUSSON'S fourth lecture much surpassed its predecessor in interest, on account of the novelty of the doctrines which it contained on one of the most important of the surgical questions of the day, Lithotrity. On the subject of lithotomy, what Mr. Fergusson said may be summarised in very short compass; since he confined himself wholly to the operation as practised in children, and took special notice of two points only. The first of these was, that the stone may be missed, and the operation be abandoned, in consequence of the operator having cut between the bladder and rectum, and made a cavity there with his finger, which he mistakes for the bladder, and in which, of course, no stone is to be found; while all the time there is a stone in the bladder, which could be discovered and extracted if the incisions were carried a little deeper. Mr. Fergusson left his audience under the impression that he is disposed to attribute the greater number of failures in discovering the stone to this cause. It is an accident which, he says, he witnessed in the early days of his career; and it is one which, no doubt, often occurs. We quote the passage.

"In my early days of study, I was struck and excited by the circumstances that a surgeon of repute had cut into the bladder of a child to extract a stone where none could be felt. The case was considered an example of error in diagnosis. The patient recovered from the wound, but the symptoms of stone continued, and about three months afterwards another surgeon extracted a stone of considerable size from the bladder by the ordinary operation of lithotomy. Another case of a like kind came under my cognisance about the same time; and the impression on my mind was strong, that in neither instance had the bladder been reached in the first operation.

"In early life, I assisted an experienced operator in this proceeding on the adult. Having, as he supposed, cut into the bladder, the stone could not be touched. Here I had an opportunity of examining the wound, and, a suggestion having been made that the bladder had not been opened, the operator, with remarkable dexterity, cut further in the right direction, opened the viscus, and, with great rapidity, extracted the stone, which he had previously detected by sounding. In this instance, I had no doubt whatever that the surgeon had not originally cut deep enough, but had made a space with the forefinger of his left hand, between the pubes and neck of the bladder, which he had for a time mistaken for the bladder.

"These and other similar instances which occasion-

ally came to my knowledge, gave me a strong impression that, in those cases where surgeons were stated to have cut for stone where one had not been present, they had probably not reached the bladder at all. In the course of time this impression has become much strengthened; and in giving, by this lecture, greater currency than heretofore to the frequent clinical observations which I have made on this subject, I feel assured that my experience and views will not be lost upon those who are earnest in the study of this most interesting operation."

There can be no doubt that the surgeon, in lithotomy on children, if he be not very careful, is apt to slip away from the groove of the staff, after he has opened the urethra for a short distance, into the cellular tissue between the bladder and rectum, and there make a cavity (by feeling about with the finger) which might be taken for the bladder. We have ourselves seen this accident occur more than once. The next point which Mr. Fergusson noticed refers to an accident which would be still more dangerous; viz., to the possibility of tearing through the urethra altogether, and pushing both prostate and bladder before the finger into the pelvis. This accident occurred in Mr. Fergusson's own practice, and is thus related by him.

"On the 17th of March, 1849, I had to operate on a boy four years of age at King's College Hospital. I used a scalpel, as I had often done before, and made the ordinary incisions for lateral lithotomy. A grooved staff with a large curve was the director into the bladder. In making the deepest part of the incision I purposely used the cutting instrument as lightly as possible, with a view to open only a part of the membranous portion of the urethra, and notch the prostate and neck of the bladder. These objects being effected, the point of the forefinger of my left hand was, as usual, placed on the staff, and pushed gently towards the bladder. The finger went on, but I was aware that it had not got between the urethra and the staff. With an insinuating movement (much to be appreciated by the lithotomist who, as I do, professedly makes a small incision in this locality), I endeavoured and hoped to get its point as usual into the urethra and neck of the bladder. But here I felt conscious that I had failed. I was aware that the finger was getting deeper as regarded the depth of the perineum, but that I was not materially nearer the bladder. I could feel a considerable space at the point of my finger, and was convinced that the upper part of the membranous portion of the urethra, as well as the sides above the wound, had given way to the pressure of the point of the finger, and that now, as the latter was getting deeper into the wound, I was only pushing the prostate gland and neck of the bladder inwards and upwards. These parts seemed to recede before the smallest imaginable force, whilst I felt that I could in a manner make any amount of space round the bare part of the staff. I had no difficulty in distinguishing between the surface of this space and that of the mucous membrane of the bladder. Moreover, I knew that I had never crossed that narrow neck which is always felt as the finger passes into the bladder when a limited incision is made. An impression came over me that I was about to fail in getting into the bladder, and I had the idea that, unless I could open the urethra just in front of the prostate more freely, I should possibly never reach the stone. Any additional use of the forefinger of the left hand only endangered the further separation of the prostate and neck of the bladder from the pubes, and I was conscious that the only safety lay in cutting a little more freely on the groove of the staff. This I effected with great caution, and then I could appreciate the

passage of the finger as usual through the prostate and neck of the bladder. The stone was thereafter easily touched and removed; but, when all was finished, I was forcibly impressed with the idea that I had nearly failed in the performance of the operation."

There is no doubt of the occurrence of the first accident; and we may accept Mr. Fergusson's testimony for the reality of the second, though it may be observed, that no evidence of the fact seems to have been furnished by dissection. It seems strange that any force which the finger of a judicious operator could apply to the wound on the convex part of the lithotomy-staff should tear through the whole urethra, including the part which is supported and defended by the concave part of the staff. But Mr. Fergusson rather passed over the fact that cases of cutting for stone, where no stone was found, and where the bladder was unquestionably cut into, have occurred, and have been proved by *post mortem* examination to have occurred—as witness the celebrated case which was lately published by Mr. Paget of Leicester. The surgeon requires to be cautioned, it is true, against the operative errors which Mr. Fergusson spoke of; but the caution against undertaking an operation which is utterly superfluous is surely equally necessary, particularly as such an operation, performed in the absence of a stone, is more dangerous than an ordinary operation for lithotomy, because more time will be spent on the fruitless hunt.

The lecturer concluded this part of his subject by referring to his own experience in the matter; viz., 159 operations for lithotomy on the whole, 50 of which were in boys (or patients, for Mr. Fergusson did not state whether females as well as males were included) under 15 years of age, and of these latter 2 died.

In lithotripsy, Mr. Fergusson justly claimed some right to speak from experience. Having, as he said, "treated between 250 and 300 cases of stone by lithotomy and lithotripsy," it will follow, from the statement in the last sentence, that he must have had experience of more than a hundred cases of lithotripsy. The chief particulars in which this large experience has led Mr. Fergusson to differ from his colleagues are, that paralysis of the bladder rather favours the operation than otherwise, and that it is better to withdraw the fragments with the lithotrite (provided proper instruments be used) than to wait for their spontaneous expulsion. The former proposition is a corollary on the latter. If the bladder is to be the engine for expelling the fragments, its paralysis would be an insuperable bar to the operation; if, on the contrary, the surgeon is to fish them out with the forceps, the less irritability there is about the viscus the better. The following extract is the one which conveys Mr. Fergusson's meaning the most clearly.

"My chief object in this portion of my lecture is to draw attention to this subject (viz., the extraction of the fragments by means of the lithotrite or scoop, instead of waiting for their spontaneous expulsion). It is comparatively little known; and, moreover, a very general impression prevails that it is incorrect to extract fragments. The various instruments and mechanical devices which have been from time to time recommended or used for this purpose, or to facilitate their escape, have generally proved of so little service, that they have been in a manner overlooked or laid aside by the practical lithotritist. It has even been taught that no attempt should be made to extract fragments; and, as I have already stated, so strong is the feeling in this respect, when stone in the bladder is conjoined with paralysis of that organ, that the operation of lithotripsy is considered highly objectionable, if not impracticable, be-

cause there is no likelihood of the fragments passing away, excepting through a large-eyed catheter or scoop made specially for the case.

"With the instruments which it is my object to recommend, the process of lithotripsy, and I believe the distress of the patient both bodily and mental, may be considerably abbreviated; and instead of paralysis being objectionable, it is perhaps the condition most favourable to the operation, as it generally happens that with paralysis there is a callousness of the mucous membrane of the bladder which permits a freer use of the blades than under ordinary conditions.

"In early days, a large instrument was thought essential for the due performance of lithotripsy. The risk of bending or breaking was deemed considerable and serious, and on these grounds the largest instrument which the urethra would admit was selected for use. If a catheter or so-called scoop was used afterwards, its magnitude was thought of equal importance; and to give every advantage in this respect, it was recommended that the urethra should be dilated, and, if needful, the orifice in the glans enlarged by incision, prior to the use of lithotritic instruments.

"As to the advantage of a large urethra, there can be no doubt; but I believe that large instruments are by no means so essential. Indeed, I feel assured that comparatively small-sized ones are an advantage, and in certain stages of the treatment I believe them of great value."

Mr. Fergusson exhibited the instrument which he recommends and uses, having a narrow shank, which allows of easy movement in the urethra and bladder, and a large end, whereby the stone is more easily grasped and seized; the female blade of the instrument being closed, so that the fragments of stone are retained in it. With such instruments, Mr. Fergusson is accustomed to clear away the *débris* of the stone after it has been crushed, and thus to shorten the process in a successful case, doubtless, to the patient's great comfort and convenience; seeing that, if the stone be of moderate size, he is hardly confined to the house at all.

Mr. Fergusson gave an instance in which a gentleman was relieved of the fragments of a "moderate sized stone" in a single operation, left town the next day, and remained free from symptoms for four years. After this he again presented himself, and then Mr. Fergusson removed with the scoop three stones so small as not even to require crushing. In a few days, all irritation had subsided, and he was able to go home. Finally, in July 1859, an entire stone, about half an inch in diameter, was removed by the same instrument, and he has since remained free from symptoms.

Doubtless, in cases such as this, the practice recommended by Mr. Fergusson is not only the best, but, as far as we know, is the one always adopted. That is to say, when small stones or small fragments of stone have been long in the bladder, so that it may fairly be concluded that their rough angles are worn down, and when, on being grasped by the lithotrite, they seem so small as to be able to pass through the urethra without undue stretching or violence, few lithotritists would hesitate to extract them at once. We have often witnessed the advantages of this proceeding, which is, indeed, precisely analogous to the practice pursued in the extraction of foreign bodies. The only peculiarity of Mr. Fergusson's method is the small size of the instruments which he employs;\* a peculiarity which may reasonably be

\* But this Mr. Fergusson regards as an essential feature, for he concluded the whole lecture with the following passage:—"The small instruments which I now show are essential to the practice which I advocate, and with these I maintain as I have amply tested in numerous cases) that lithotripsy can be abbreviated and brought to a certainty such as has not been claimed for it hitherto."



taken to be an advantage on the strength of Mr. Fergusson's authority, which, in matters of operative manipulation, must surely be supreme.

But a much graver and more uncertain question connected with Mr. Fergusson's method of performing lithotomy is, whether he is right in recommending the instant removal of the *débris* in cases of crushing a stone of large size. We should remember that, in this case, the fragments are of uncertain size (for, after all, the width of the opening of the lithotrite only shows one diameter of the fragment); their angles are fresh and sharp; and the bladder has perhaps already borne as much manipulation as is prudent. Further, we should remember that (with the exception of the small shank of Mr. Fergusson's scoop) this is the method which was originally adopted, and abandoned on account of the pain, laceration of the urethra, and after-complications which ensued. It would, perhaps, be invidious to quote one author against another; but it is allowable to say, in general terms, that lithotritists of the largest experience, who have had ample opportunities of knowing the minutest particulars of Mr. Fergusson's system of manipulation, still avow their preference for the plan of awaiting the spontaneous expulsion of fragments. Evidently, therefore, the question resolves itself into one of experience; and, as to Mr. Fergusson's experience, his expressions were rather more vague than we could have wished. He said:

"In the last sixty cases I have adopted this practice generally, and, with few exceptions, have had every reason to be satisfied. Occasionally, when over-anxious for a rapid cure, I have extracted fragments rather too large to come readily along the urethra, particularly in the prostatic or membranous portion, or at the triangular ligament. In some, when the urethra nearest the neck of the bladder has been rather roughly used, there has been considerable irritation; in others, even under such circumstances, there has been no irritation whatever; and in many instances I have been able to effect in one or two operations within ten days what, according to custom, would take weeks, or possibly months. I have done, in fact, by a precise surgical manipulation, that which according to ordinary rule is left entirely to chance. Experience has taught me that it is almost hopeless to trust to chance in all such cases; that in many instances the fragments may be weeks, or months, in coming away, even with attempts to coax them through catheters with large eyes and other instruments devised for the purpose. Here are the fragments of stone crushed in a man whose bladder acted regularly, yet only a few of these passed spontaneously; all the rest were removed by the scoop in question in three or four operations. From first to last there was not a single bad or even troublesome symptom. The patient was detained scarcely an hour in bed beyond his regular period of rest. I never saw one suffer less distress; yet, before he came under my notice, he had been strongly urged by an eminent surgeon to submit to lithotomy."

If Mr. Fergusson had preserved such notes of his cases as would have enabled him to say precisely in how many cases he had removed the *débris* at the time of operation, how many of these had had troublesome symptoms, what these symptoms precisely were, and what were their results, it would have been more satisfactory, and would have put us in a better position to draw a comparison between his method (or rather his revival of the old method) and that which is in more general use. What struck us, after hearing what Mr. Fergusson said on this matter, was, that if a patient with stone were fortunate enough to be in Mr. Fergusson's hands, he might perhaps have his cure somewhat accelerated (though

probably at the risk of increased suffering at the time of operation) by this plan of removing the fragments; but that, if he had fallen into the hands of some less ingenious manipulator, he would be lucky if his surgeon were not in so great a hurry to send him away cured. In fact, we could not repress a latent suspicion that the old adage of "*Festina lente*" might, after all, express the better policy.

## Lettsomian Lectures

ON

### MIDWIFERY AND DISEASES OF WOMEN.

*Delivered before the Medical Society of London.*

BY

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#### LECTURE III. (Continued.)

##### THE TREATMENT OF FIBROUS TUMOURS.

2. *Treatment by Gastrostomy.* I have now to speak of another mode of cure; viz., *gastrostomy*. At the outset, I may say that, in the consideration of the cases in which this operation has been had recourse to, we labour under three disadvantages. 1. Several cases, I know, have been unpublished; and, therefore, the instances quoted fall short of the actual number of examples that have occurred. 2. The records of these cases are by no means full. The details are often so meagre as to leave little room for philosophical deductions. 3. It is possible, on the other hand, that I am exaggerating the number of examples, and that the same cases are repeated. This was undoubtedly so with one of Dr. Clay's cases; which that gentleman, however, kindly explained to me. In Atlee's cases, again, it is just possible that this source of error exists. In such instances, however, the mistake is due to the imperfect records and disagreements between them, more especially in regard to dates of recovery, of death, age, married or single state, size, weight of the tumour; in which particulars the records, otherwise resembling each other, disagree.

Altogether, gastrostomy for fibrous tumour has been performed forty-eight times. In fifteen cases, however, the tumour, either in whole or in part, was not removed. In the remaining thirty-three, the entire or part of the tumour was removed. This *resumé* admits at once of division into two classes.

1. The cases of uterine tumour in which gastrostomy was performed, and extirpation not completed, were fifteen. These include four of Dr. W. L. Atlee, one of Dr. Cutler, one of Mr. Lane, one of Mr. Lizars, one of Dr. R. D. Massey, one of Dr. N. Smith, one unknown, one of Mr. Walne, one of Dr. Deane, and three of Mr. I. B. Brown. (See Table II.)

In five of these, the exact locality of the tumour is not given: two were fibrocystic; one extrauterine; one a double example—i.e., intrauterine and extrauterine; six parietal, one of these last being combined with pregnancy.

Of these fifteen cases, eight recovered from the operation. But, of these, three subsequently died; one six months afterwards, from erysipelas; another seven

TABLE II.—Cases of Uterine Tumour in which Gastrotomy was performed, and Extirpation not completed.

| No. | Operator and Reference.  | Age. | Previous History, etc.  | Steps of Operation.   | Progress.  | Final Result.   |
|-----|--|------|---|---|--|---|
| 1   | Dr. W. L. Atlee, Philadelphia. <i>Am. Journ. of Med. Sci.</i> , April 1855. <i>Clay's Kurisch, Table iv.</i> | 34   | Single. Tumour noticed four years ago, since which irregular. Tapped, and blood only escaped. Uterine sound passed two inches and a half only.  | Operated May 22, 1849. Incision from umbilicus to near pubes. A syphon tent placed in lower part of wound. No adhesion. Wound united by interrupted and twisted sutures.  | Recovered operation, and sat up nine days afterwards.            | Died a month afterwards from erysipelas.  |
| 2   | <i>Ibid. Ibid.</i>   | 43   | Single. No account of duration, etc. Tumour after operat. found to be uterine, incorporated with large cystiform bodies fibrocystic.  | Operated Oct. 13, 1849. Incision from near umbilicus to pubes. No adhesions.  | ..   | Recovered. Died 14 years afterwards.  |
| 3   | <i>Ibid. Ibid.</i>   | 41   | Unmarried. Woman of colour. No account of duration, etc. Uterine tumour not adherent.   | April 13, 1850. Incision from near umbilicus to pubes. Intestines were forced out, and could scarcely be returned, in consequence of the anæsthetic agent inducing a cataleptic cond. of muscular parietes.   | ..   | Recovered. Still living, April 1855.  |
| 4   | <i>Ibid. Ibid.</i>   | 42   | Married. No account of duration. An extrauterine fibrous tumour.  | Operated Dec. 20, 1851. During the operation, an abscess deep in the abdomen was opened and a quantity of pus discharged.   | ..   | Recovered. Still living, April, 1855.   |
| 5   | Dr. Cutter, of Woburn. <i>Am. Journ. of Med. Sci.</i> , 1851.  | 33   | Single. First noticed tum. 7 yrs. ago, afterwards, very percept. in l. hypogastrium. Developm attended w attacks of peritonitis & dysuria, leading to use of catheter. Catam. regular, lately accompanied by Soreness of abdomen followed by ascites, for which she was twice tapped since her health failed, Feb. 1838. Tumour felt low per vaginam. Simpson's sound penetrated 5 in. Case pronounced hopeless, but wom. so urgent for operat., it was tried. Cervix & fundus uteri involved. A large tumour from wh. several smaller ones projected in cavity of abdomen. Parietal. | Operation performed Oct. 12, 1833. Incision 9 inches in median line. Tumour found to be fibrous. Connections forbid removal. Tumour punctured and bled profusely, so as to require ligature. Wound closed.  | Several days suffered but little pain under use of opium.        | Died 12 days after operation. P.M. Very little peritonitis. Integum'ts healed and opening in uterus also. |
| 6   | Mr. Lane, London. <i>Clay's Cases of Diseases of Women</i>   | 42   | Single. Disease of many years' duration. Health good. Tumour after operation to be a large fleshy tubercle of uterus. Parietal.   | Operated 1847. Incision from umbilicus to pubes. Tumour too much connected with uterus for removal. Wound closed by 15 interrupted sutures not through peritoneum.  | Wound healed.  | Recovered, but died five weeks after operation. Suicide suspected. A 3 months fetus found in uterus.      |
| 7   | Mr. Lézais, of Edinburgh. <i>Laz. Lect. of Dis. of Women</i> , pp. 19-20.                                    | 34   | Unmarried. Tumour observed six years ago. Catamenia irregular; urine occasionally suppressed, general health good; had considerable muscular strength, but earnestly entreated something might be done to relieve her.  | Operated April 24, 1825. Incision from sternum to pubes. The tumour was pierced and incised twice, but nothing but pure blood followed. The wound was then closed by sutures and adhesive straps.   | ..   | Recovered in a fortnight. Died Nov. 23, of Apoplexy. <i>Lambert, Edinburgh J. Med.</i> , March 1851.      |
| 8   | Dr. R. D. Massey, America. <i>Hamilton's Rep.</i>  | ..   | No account of duration, etc. After operation found to be a tumour in uterine walls. Parietal.   | Operated 1850. Large incision.  | ..   | Died from exhaustion fourteen hours afterwards.   |
| 9   | Dr. N. Smith, America. <i>Lycan's Rep.</i> Boston, 1851. Case 248.   | ..   | No account of duration.   | Long incision. Uterus found to be involved, and constituting largest part of tumour. Wound closed.  | ..   | Recovered.  |
| 10  | Unknown. Germany. <i>Scanlon's Beitr.</i> , 1858. <i>Sim's Table.</i>  | 36   | Hard tumour in abdomen with ascites.  | Found to be cancerous tumour connected with uterus. Wound closed.   | ..   | Death in three days.  |
| 11  | Mr. Walne of London. <i>14th Med. Gaz.</i> , Mar. 10, p. 11.   | 45   | Uterine disease; fibrous tumour, cysts of ovary, solid and fluid. Parietal.   | Long incision.  | ..   | The tum'r resting against incision was supposed to have caused inflammation and death.                    |
| 12  | Mr. J. B. Brown, London Home.  | 43   | Admitted Oct. 12, 1860. Tumour first noticed right side of abdomen, about size of an egg, 9 years ago, increased gradually; general health good. <i>Examination.</i> Large mass of fibrous tumour discovered within the uterus; also a fibrous tumour attached externally to fundus, to be felt through parietes. After the first operat. the tumour was found to be growing, and having a feeling of fluctuation not to be defied. Fibroid, vascular, intrauterine and extrauterine.   | First operation, os uteri and cervix uteri incised on each side, under chloroform. Jan. 21, 1861. Exploratory incision made through abdominal parietes. A large fibrocystic tumour discovered by which whole pelvis was modelled, and which had grown above brim, and was so firm as to be immovable. Fluctuation evident. On cutting in, tumour was found to be made up of a number of engorged vessels which bled freely. The incision was deep. Brought together by 3 silver sutures. Wound closed by ed. way. | Not a bad symptom after gastrotomy. Wound healed. Left the Home. | Recovered imperfect health. Tumour passive, no inconvenience.   |



TABLE II.—*Continued.*

| No. | Operator and Reference.   | Age | Previous History, etc.  | Steps of Operation.   | Progress.  | Final Result.   |
|-----|---|-----|---|---|--|---|
| 14  | Mr. I. B. Brown, London Home Communicated   | 30  | Marrried four years. Admitted Nov. 2, 1862. No children. Always healthy till six years ago, when she first perceived the tumour. This increased at each epoch, subsiding with its cessation. Catamenia copious. Health failing in 1860 escaped. Two quarts of dark dull drawn off. Catamenia regular. <i>Evacuation</i> . Large multilocular ovarian tumour diagnosed; also what appeared to be unconnected umbilical hernia at omentum. <i>Pelvic cystic.</i>  | Operated Dec. 11, 1862. After pri-<br>mary incision, large quantity of<br>ascitic fluid escaped. A cyst then<br>came into view, which looked like<br>intestine, and on exam. tumour<br>was found to be composed of several<br>hard masses (like scirrhus) and<br>very adherent in every direction.<br>It was attached to the whole omen-<br>tum, liver, and uterus, being also<br>quite immovable. A quart of pale<br>yellow fluid was drawn off from 2<br>of the cysts, and the wound closed<br>with silver sutures. | Went on well<br>till 17th, when<br>coughing violent-<br>ly, wound<br>was forced open,<br>serous fluid coming<br>out. Concl.<br>a few days.<br>Dec. 26, small<br>abscess opened<br>at upper part of<br>wound. Stimu-<br>lants, wine, and<br>acid given. Tum-<br>our refilling.<br>Sickness. Wind<br>gaping. | Died, January<br>6, 1863.   |
| 15  | Mr. I. B. Brown, Ditto.   | 41  | Married 17 yrs.; no child; 2 miscar. Admitted Feb. 2, 1863. Irregular since marr.<br>1848. Since had severe pain, l. hip, w.<br>persisted spite of trinit. Six mths after<br>perceived a sm. tumour in r. ov. region.<br>This increas'd gradually & became central.<br>Latterly menstr. more irregul., <i>suppressed</i><br>since Nov. last. Whole abdomen filled w.<br>tumour larger than full twin pregnancy.<br>Irregular in outline, w. 2 small outgrowths<br>superiorly. In parts indistinct fluct. or<br>elasticity. Pelvis was so filled up with<br>tumour and os so drawn up behind pubis<br>that sound could not be introduced. Gen-<br>eral health bad. Patient urgent for opera-<br>tion. Diagnosis obscure. <i>Partial</i> .<br>Fibroid complicated with pregnancy. | Feb. 26. Exploratory incision,<br>3 inches long. Tumour found very<br>vascular, more like muscle than<br>cyst of ovary. Trochar plunged in<br>to make sure, giving exit only to<br>a little blood. Closed by silver<br>wire. Aft. manual parietes also.   | Some tympan-<br>ites, yet preg-<br>well till Mar. 3,<br>when she had a<br>rigor; fever per-<br>sisted till 12th.<br>l. ab. inflammation<br>of r. uterus and<br>right eye. Insen-<br>sible; tender-<br>ness of abdo-<br>men. Fœtus<br>came away.  | Died exhausted,<br>17th. P.M. 4 p.m.<br>of peritonitis.<br>Tumour<br>adherent to pel-<br>vis and to<br>about 2 square<br>inches of liver.<br>Tumour size of<br>a peck basket,<br>with smooth &<br>regular surface,<br>with two small<br>lumps of size of<br>a filbert attached. Tumour all fibroid, involving whole left side of<br>uterus. Fœtus must have lain to left side, also occupying position<br>parallel to tumour, half being impregnated uterus, and half tumour.<br>Parietes containing fetus in no way contracted. Several purulent<br>points in kidneys and liver. |
| 16  | Dr. Dean, <i>Brit. Med. and Surg. Journ.</i> , 30, 221, 1861. 1868. <i>Amer. Med. and Surg. Journ.</i> , vol. 13, 68. | ..  | A globular symmetrical tumour, resting on<br>pubis in front and sacrum behind. Raised<br>in recumbent position and free impulse<br>given to it. In erect immovable. Length<br>perhaps 6 or 7 in. long by 4 or 5 in. broad. Seems<br>to spring from right ovary, still might be<br>uterine. Functions of uterus normal, no<br>deviation. No pain, but increasing rapidly.<br><i>Uterine. Partial.</i>  | Incision made on the left side of<br>umbilicus, carried down to pubes.<br>Round polished solid tum. expos.<br>covered with very large vessels. No<br>adhesions. Intestines forced out.<br>Found to be a solid fibrous tumour<br>of uterus involving left half. Opera-<br>tion stopped after consultation, and<br>parts returned. No bleeding<br>of any note occurred.   | Inflammation,<br>fold, with spas-<br>modic twitch-<br>ings which con-<br>tinued till 6th<br>day, removed by<br>depletion.  | Recovered in a<br>fortnight.  |

months afterwards, of apoplexy. The third, one of the fibro-cystic disease cases, died four years afterwards.

The remaining seven died. In two of these the tumour was combined with pregnancy. One died five weeks after the operation, and there was some reason to suspect suicide. The second seems to have died of peritonitis. One died of slight peritonitis, in twelve days; another, of exhaustion, in fourteen hours after the operation. Another died of inflammation of the tumour; one of abscess. The cause of death in the last is not stated.

The first two fatal cases here mentioned should clearly be excluded. We cannot doubt that the diagnosis was most difficult, if not impossible, during life. This we are assured of from the character of those in whose practice the cases occurred. Still, if the principle so forcibly insisted upon by Dr. Greenhalgh had been adopted, and in which I fully concur—never to operate unless you can introduce the sound *in uterum*—which was in one of these examples, at least, tried several times, and without success, these cases would not have been operated upon. Thus we have thirteen cases and five deaths—a mortality which seems to justify the operation, if an operation be imperatively called for. One of the fibro-cystic cases, indeed, recovered and lived four years afterwards. It is not to be presumed, therefore, that she was other-  
wise then benefited from the operation.

[To be continued.]

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

HEMIPLEGIA ON THE RIGHT SIDE, WITH LOSS OF SPEECH.

Cases under the care of JAMES RUSSELL, M.D.

IN a very interesting letter to this JOURNAL (May 21st, 1864), with the title prefixed to the present paper, Dr. Hughlings Jackson makes the following statement: "I have noticed that when defect of speech occurs with hemiplegia, the hemiplegia is, so far as my experience goes, invariably on the right side." Any statement by so laborious and accurate a student of cerebral pathology as Dr. Jackson must be received with much respect; and he had interested me in the subject by a conversation a short time before his letter appeared. I am, therefore, led to present the result of an examination of my case-books, as a contribution towards the inquiry which Dr. Jackson invites.

The cases from which the following abstracts are made have, of course, been reported entirely without regard to the question raised by Dr. Jackson; therefore, if the testimony they afford be sometimes defective, it has the advantage of being unprejudiced.

I have inserted every case of hemiplegia contained in my case-books, without regard to its character, save in one or two instances, in which the particulars are too imperfect to be of any pathological value; and I have also adhered, as far as possible, to the language originally employed.

*Hemiplegia of the Right Side.*

CASE I. Male, aged 16; paralysis of right arm, not of leg, of three weeks' duration. It came on gradually. "Articulation imperfect—sometimes difficult to understand him"; speech soon became perfectly unintelligible, with increasing paralysis of arm and retention of urine. Tongue deviated slightly to the "left" (?); some paralysis of right side of face. Rapid death after two "fits" of general rigidity, in a state of perfect unconsciousness. Two effusions of blood, a recent and an older, in the left crus cerebri, and in the left side of the pons, strictly limited, in the latter situation, by the median line. Vessels at the base healthy. Valves of the heart healthy.

CASE II. Female, aged 21; very dissipated; probably had had syphilis formerly, though no present evidence of the disease. Hemiplegic a week; history of attack perfectly unknown. Complete paralysis of the right limbs; partially of the face, with deviation of the tongue; sensibility of the paralysed limbs lessened. Articulation perfectly extinguished; swallowing unaffected; apprehension rather dull. Pulsation of the left radial artery could not be felt. Sounds of the heart quite clear. The patient soon recovered her mental faculties; perfect power of apprehension was manifested by the signs with which she responded to questions. She slowly regained power in the leg; the arm, however, remained powerless; the muscles of both limbs wasted to some degree. Speech consisted merely in laryngeal sounds; no excitement could produce more than a monosyllable, "aye," "no." She had been heard to say "jaw," "a great deal," and once, under strong excitement, to say "fool." She replied to every question by a perfectly inarticulate laryngeal sound; the movements of the arytenoid cartilages were perfect. Pulsation returned to the left radial artery in six weeks. The patient remained in the condition first described four months after her seizure; the tongue, at the last, was not protruded quite directly. She was unable to write, so that we could not test her power of connecting ideas with words.

CASE III. Male, aged 35. Repeated attacks of syphilis. Three days before admission, sudden loss of speech, with impaired muscular power in the right arm; consciousness entire; pain in the right side of the forehead, and in the occipital region. When seen, he presented some feebleness of grasp in the right hand, and imperfect contraction in the muscles of the right side of the face. Tongue protruded normally. Sensation perfect. Articulation so much impaired, that it was only by exercise of great patience that what he said could be interpreted. Articulation improved gradually, and was nearly restored at the end of three weeks; the arm recovered more rapidly; but evidence of failure of memory was now afforded, with great tendency to drowsiness. At this stage, he passed from our observation. Two months before his attack, he had experienced temporarily slight difficulty in talking.

CASE IV. Male, middle age. During six weeks preceding admission, three or four epileptiform fits affecting mainly, if not entirely, the right side. Three weeks afterwards, gradual paralysis of the right arm, becoming complete; then of the leg; with impairment of sensation and of mental power. Tongue protruded direct. Apprehension remained perfect. Articulation was distinct; but he was un-

able to find his words, so that he came to a stand almost immediately after having commenced a sentence; there was also reason to disbelieve the correctness of the signs which he made. In two days, however, articulation began to suffer; he could only pronounce the first word of a sentence and mumbled quite inarticulately. Then the tongue deviated slightly to the right, and the right side of the face manifested weakness. He ate with difficulty; became unable to swallow; passed his evacuations involuntarily; and died sixteen days after admission. Two fibrinous tumours, a part of a general formation of similar tumours in other organs, existed in the white matter of the left hemisphere, involving one convolution, but leaving the corpus striatum and thalamus intact; one was seated about the middle of the hemisphere, near the surface, and was as large as a walnut; the other, the size of a pea in the under portion of the posterior lobe. A third, of the size of a hazel-nut, attached to the dura mater, was embedded in the brain, in the immediate neighbourhood of the one last mentioned.

Dr. Anderson was kind enough to call my attention to the following two cases among the out-patients of the hospital.

CASE V. Female, aged 31. Six months ago was taken suddenly with hemiplegia of the right side, without loss of consciousness; the paralysis was so complete that she could not be moved, but remained on the sofa for two days; she kept her bed for nine days. Power of articulation was at once extinguished. The right side of the face was somewhat paralysed; control over her evacuations was not impaired. She had now recovered some power over her arm, and could walk half a mile; but she had never uttered any word but "aye," "no." Her mental faculties were believed to be perfectly retained.

We found her very intelligent; some rigidity in the flexors of the right wrist, and diminished girth of the arm. Sensation perfect. Tongue protruded direct. She only complained of heat on the top of her head. The sounds of her heart were clear and pure. Her only words were "aye," and "nay." These seemed to be pronounced indifferently; at least, she was easily confused in the use of them when at all hurried, and used the words at random, or apparently with no clear idea of their force. Thus, we desired to learn whether a miscarriage from which she had suffered preceded or followed the birth of the last child; she said, "no," "aye," "no," in rapid succession, and became greatly confused. Shewn a book, she could not pronounce the word, but wrote "book" on paper; immediately afterwards shewn a shell, looked at it doubtfully, and intimated she could not tell; then shewn a cup, nodded her head, and wrote "shell" on the paper; then shook her head, intimated she did not know, and could not be induced to continue the experiment; yet she had all the character of possessing perfect intelligence and quickness of apprehension. The cause of the attack was not apparent.

CASE VI. Female, aged 6. Suddenly attacked with right hemiplegia three days ago, accompanied with perfect loss of speech. She had fever twenty-one weeks ago, and had remained sickly ever since. She has now recovered the power of walking; but her arm is powerless. She is able to articulate "yes," but no other word, though she tries to do so. Her face deviates to the left; her tongue is protruded direct. Power of swallowing is entire. Her mother believes her perfectly intelligent, and she certainly appears so. She can neither read nor write, so that I cannot apply the test I used in the preceding case; her mother says that she points out at once what she wants. The sounds of her heart and lungs are perfectly healthy.



CASE VII. Male, aged 55; very intemperate. During a week, gradual loss of sensation and motion in right arm; at the end of that period, he became suddenly "deranged" and speechless; when his wife brought him his breakfast, "he laughed at her, and has not spoken since." On the day following the one just specified, he sat crying, "wanting to speak, but being unable." Two days afterwards, I found complete paralysis of the arm; incomplete of the leg; the tongue deviated to the right; "he does not attempt to speak. The sounds of his heart were clear and pure. During my attendance, it is noted that he repeatedly made efforts to speak, which merely resulted in, inarticulate noise. Eighteen months afterwards, he was little changed. He died four years after his attack. I was informed that he could walk a little; but the arm continued powerless, with rigidity of the flexors; he never regained speech, but to the last could only articulate a few words intelligibly. Intellect was believed to be unimpaired. He died by asthenia. On *post mortem* examination, the head alone was examined. There was increase in the subarachnoid fluid; and the substance of the brain, especially of the left hemisphere, was very oedematous, fluid issuing from it as from a sponge. There were two small apoplectic cysts in the left hemisphere—one in the anterior lobe near the upper surface; the other, in the middle lobe. The primary vessels at the base were healthy, excepting that each internal carotid was very narrow just at its entrance within the skull. The description is very obscure, and only enables me to state that the anterior cerebral artery of one side was much obstructed by thickening of its walls.

CASE VIII. Female, aged 31. She had suffered a long time from much debility. Two days before I saw her, she suddenly reeled, and would have fallen, had she not been caught; she was insensible; her mouth was drawn to the left side, and the right limbs were powerless. "She has lain without speaking or giving any intimation that she was sensible of outward occurrences;" she swallowed with some difficulty. She died six days afterwards; she did not regain power in her right limbs; "she seemed quite insensible, but endeavoured to draw up the bed-clothes when they had been drawn off her"; "she often moved her hand to her head." "She shook her head this morning when an attempt was made to pour wine into her mouth." "She plainly has a choice as to what is put into her mouth, as she indicates preference for beef-tea by a motion of her hand." "Has taken her medicine and fully eight ounces of wine, opening her mouth for it." The preceding statements are extracted from different portions of the report; but not an intimation is given of her having uttered an articulate sound; and it is noticed that, in a threatening of an attack, which she had had previously, she did not lose her speech. She gradually sank without any other important symptoms.

SECTIO CADAVERIS. The left corpus striatum was perfectly softened; no trace of its normal tissue remaining. The thalamus was unaffected, quite firm, and its grey and white substance beautifully distinct. The process of softening had extended into the central white matter of the hemisphere, involving nearly two-thirds of its substance, but lying more to the front than posteriorly. The grey matter of two deep central convolutions was also softened, so that one of them fell from the white tissue around, leaving a cavity in which the finger would have lain. The opposite hemisphere, and the organs at the base of the brain, were healthy. The edges of the mitral valve of the heart were thickened, and the orifice was narrowed.

CASE IX. Male, aged 44; a very intemperate sub-

ject; affected with chronic desquamative disease of kidneys. He was attacked with sanguineous apoplexy, which ended in death in seven days. The right limbs were paralysed. At my second visit, I record, he is "apparently conscious, but cannot speak nor protrude his tongue."

CASE X. Male, aged 56. A week ago, attacked with "right hemiplegia, temporary loss of consciousness, and interference with speech." "Loss of consciousness lasted half an hour; but two days elapsed before his articulation was sufficiently distinct to allow of his giving some necessary instructions." I found him rational, but very excitable, and he became very delirious after my visit, the delirium lasting through the day. His mind was easily confused. His speech had become clear, but a little confusion about words remained. The paralysis had lessened in the arm to a greater extent than in the leg, but sensation remained much impaired in the whole right side.

CASE XI. Male, aged 39. Was attacked during sleep, with complete right hemiplegia, eleven months ago. On waking, besides being paralysed, he was speechless; and he did not articulate, sufficiently to be intelligible for eight weeks. The paralysis improved very gradually, but was never removed altogether; "it fluctuated." On admission, speech is described both as nasal and as guttural, as though he had a sore-throat. The tongue deviated to the right. The hemiplegia remained to a certain extent, with marked impairment of sensibility in the entire right side. There was also partial paralysis of the right fifth cerebral nerve and of the portia dura of the seventh; vision in the right eye was impaired, and smell in the right nostril; the patient had also lost taste in the right side of the tongue and of the soft palate; the soft palate was symmetrical; hearing was less acute in the right than in the left ear. Control over the sphincters was enfeebled. The cause of the disease did not appear. The sounds of the heart were healthy. During his residence in hospital, he was attacked suddenly with opisthotonos, attended with delirium; the delirium was brief in duration, but his articulation was much impaired, and he soon became unable to speak at all. Apprehension was perfect; he replied by signs; he swallowed well; the paralysis of the arm was increased. On the following day, power of articulation was regained, and some power was restored to the arm, but the paralysis was permanently increased. He left the hospital soon afterwards.

CASE XII. Female, aged 40. Suddenly attacked with right hemiplegia a year and a half ago; this occurred early in the morning; she called to her husband, who "did not notice any difference in her speech till he got upstairs." Articulation is not again referred to in the report. She applied for feebleness in the limbs of the right side, the remains of her attack; it was then observed that objects became invisible to either eye when moved across the field of vision to the right of the middle line. She was an out-patient, and only presented herself once, so that we had no opportunity of examining her case.

CASE XIII. Male, aged 65. Attacked with hemiplegia on the right side; it commenced with imperfect paralysis of the arm; articulation then became indistinct, with increase in the paralysis; then the leg failed, speech became inarticulate, and he was restless and childish. These various stages occupied about an hour. It was found that he could not protrude his tongue. On the following day, some power was recovered in the paralysed limb, "a good deal of what, he says, is intelligible;" but mental power remained much enfeebled; the tongue deviated slightly. In six days he had considerably recovered, speech was

quite intelligible, though he "slurred words in rapid talking, and occasionally misplaced them." Tongue still deviated slightly. Little change had occurred at the end of a month.

Two months afterwards, he suddenly fell apparently in a faint; he rattled in his throat; the right side was convulsed"; and he was thought to be dying, but in no long time recovered. I saw him on the next day; "the power of the right arm was not impaired, but his command over words, and his power of arranging sentences were greatly lessened."

The patient's intellect remained permanently weakened, and a year and a half after the preceding occurrence, steady decline set in. About a year subsequently, speech became first rather indistinct, and in six or eight months was perfectly unintelligible. Control over the sphincter was weakened, and he became childish. No mention is made of paralysis, but the patient is spoken of as making his escape from his watchers. He lived for a year longer in a state of perfect imbecility.

CASE XIV. Female, aged 5. Right hemiplegia three months ago, preceded by sudden "loss of hearing and speech," and followed by twitchings of the muscles of the right side. Loss of hearing discovered accidentally a few days before the loss of speech; the hemiplegia occurred on the same day with the loss of speech, and occupied a day in becoming complete. Considerable paralysis remains, with flabbiness of the muscles, though the girth of each limb is the same. Previously to the attack, the child had suffered considerable pain in the head, and was very disinclined to play. No further allusion to articulation occurs in the report.

CASE XV. Male, aged 17. "Had a stroke" in very early infancy, the paralysis being discovered accidentally when the child was put down to support himself on the ground; the right leg and arm were partially paralysed, and until two years of age, he advanced by his left leg and hand; has since suffered from habitual headache. The last two years he has been subject to fits of *epilepsia mitior*, in which there is clear proof that he is not insensible; but he loses speech, and has some convulsive movement in his left limbs—none on the right side. The right limbs are imperfectly developed, as regards girth and length of the bones, and his power of directing the action of these muscles is imperfect. He is ready and very intelligent in his replies.

CASE XVI. Male, aged 12. Seven years ago, during the measles, he had a sudden fit of convulsion, which left the right side hemiplegic; on the cessation of the convulsion he became conscious, but unable to speak. Articulation gradually mended during the following three months, but, even yet, he has marked thickness of utterance. Paralysis to a certain extent remains on the right side, with rigidity, atrophy of the muscles, and lowered temperature. He now suffers from attacks of *epilepsia mitior*. Speech is described as being thick and nasal; intelligence unimpaired.

CASE XVII. Male, aged 57. Had suffered from pulmonary symptoms, with anasarca; no bellows sound. Found in the morning speechless, with paralysis of the right limbs; when desired to put out his tongue, he was unable to obey; but he opened his mouth with his hand, and pulled down the lip. Face was drawn to the left side. His intellect was somewhat impaired, but he answered by signs. He had great difficulty in swallowing. In three days considerable power had returned to the leg; he partially protruded his tongue; it deviated to the right. In seventeen days he articulated, though indistinctly; and six days afterwards it is reported that he cannot speak, but can articulate the monosyllable "yes." He was,

childish in intellect; was regaining power over the arm. Twelve days afterwards his state was unchanged.

CASE XVIII. Male, aged 26. A year ago he awoke with right hemiplegia—not complete—from which he has not yet perfectly recovered. At present, tongue is protruded direct; speech thick and sluggish. He kept his bed on occasion of the attack for nine days. No other report.

CASE XIX. Male, aged 56. A sudden attack of partial paralysis of the right leg and arm without unconsciousness. A fortnight afterwards, the paralysis was very slight, but "articulation was slightly indistinct." He had been exposed to much anxiety, and to the influence of many depressing circumstances. Sounds of his heart faint, but pure.

Dr. Anderson also sent me the following two patients, who were in attendance at the out-patient department.

CASE XX. Female, aged 9. Five years ago fell, striking the back of her head on a stone; was picked up insensible, and did not become perfectly sensible for six weeks; she was in a succession of fits from the moment of the fall (2 P.M.) till 2 A.M. next morning; she was then discovered to be paralysed on the right side and speechless; she never spoke through the succeeding six weeks. In the fit immediately produced by the fall, the right side was alone affected with spasm; ever since she has been subject to epileptic fits, the longest period of immunity having been three weeks. In these, as in the inaugural fits, the convulsive movements—tonic and clonic—are limited to the right side; as the fits pass off, she cannot speak for ten minutes or a quarter of an hour, and her right side is weakened for about the same length of time. She has headache after the fits, putting her hand to the right temple, but she presented no evidence of permanent injury having been inflicted by the fall. She looks remarkably healthy and intelligent. Muscular development of the right limbs perfect; tongue protruded direct. He is stated to have no difficulty in talking except on the occasions referred to above. The sounds of her heart are healthy.

CASE XXI. Female, aged 43. About nine months ago she was attacked with pain in her head (her mother cannot say in what part) with feverishness; she was not sick. When she was taken out of bed, two or three days afterwards, she was discovered to be paralysed in the right arm and leg, so that she could not stand. It was three or four days before she was able to stand, and she has never walked well since. At the time of the right hemiplegia being discovered, the child talked quite naturally; the mother does not volunteer any statement as to imperfection of speech in the preceding three days, but seems not to contradict the possibility of some imperfection in articulating, though certainly the child could always be well understood. There is unmistakable paralysis of the right arm, which is wasted; and to a much less extent of the right leg also. Tongue is protruded direct. The child looks healthy. Sounds of heart healthy.

CASE XXII. I was summoned the other day to see an old gentleman, aged 71, suffering from a second attack of hemiplegia. The former attack, in which I also saw him, occurred two years ago; the paralysis was complete in the arm; the side affected was the left. My notes, which are brief, make no allusion to articulation; but his family assure me, most readily and most positively, that speech was never affected at any period of the attack. The present attack has affected the right side; it is very incomplete, as two days afterwards, when I saw the patient, he could move the arm freely, though its temperature was much depressed. His family state that at the time of the



seizure, he became perfectly speechless, though he soon recovered power of articulating.

CASE XXIII. Dr. Jackson refers to chorea, in the same connection. I have not looked over my cases of this disease; but I have at present in the hospital a case of complete extinction of speech from chorea, the suspension of articulating power having continued an extraordinarily long time. The boy was admitted on April 13th; he was represented as having had his disease very severely since March 27th; more lightly for a longer period. On May 3rd, he articulated "no," but it was not until the 19th, that he pronounced a few words; nor could he stand at all until the 24th. In this case the choreic movements affected each side of the body equally (and therefore the right side); the disease fell with especial force upon the muscles of the tongue and face.

[To be continued.]

## Transactions of Branches.

### SHROPSHIRE SCIENTIFIC BRANCH.

A HANDFUL OF SCRAPS.

By W. W. MORRIS, Esq., Clun.

UNDER this head it is proposed to offer a few very brief notices on a variety of minor matters. "Bre- vity is the soul of wit," and "Time is money." Acting on these trite axioms, I hope I may not be charged with abruptness in avoiding verbosity as much as possible.

I. THE TREATMENT OF EPILEPSY. In the *Medical Times and Gazette* for January 26th and February 9th, 1856, will be found some very excellent remarks on the Etiology and Treatment of Epilepsy, by Dr. Henry Hunt. Amongst the symptoms are, torpid liver, excess of alkali in the blood, and acid urine, with phosphatic deposits, as the result of decomposition of nerve-tissue. The alkaline state of the blood is there said to prevent the formation of urea, and thus to cause the retention of the cyanogen. As the treat- ment by acids is theoretically indicated, so it is found practically successful; and, although I have nothing original to bring forward, it may be permitted for me to add my testimony to the almost miraculous cura- tive powers of the nitro-muriatic acid in these cases—that is, when the convulsions appear to depend on the above hæmatic conditions, and not on some other temporary cause. Although I have kept no notes of such, I might have given some very marked cases which have yielded to this treatment in my own practice during the last seven years.

II. MINOR CONSERVATIVE SURGERY. In general practice, especially in mining and manufacturing dis- tricts, we are often called on to treat various lacer- ated and contused wounds of the hands, especially the thumbs and fingers. Not long ago, I read in a medical journal a very contemptuous notice of the plan of treatment with the compound tincture of benzoin; and having for the last fourteen years used scarcely any- thing else, I was rather surprised that the treatment should be so disparagingly spoken of, since its effects with me have invariably proved exceedingly bene- ficial, far more expeditious, cleanly, and comfortable, and much less troublesome, than the adhesive plaster strapping. I have probably thus treated several hundred cases; and do not hesitate in stating that a very considerable number of compound and commi- nated fractures of the phalanges, and of opened joints, would have been cases of amputation twenty years ago, which, under this plan of treatment, have

been perfectly restored in two or three weeks, even when the finger has been hanging by a small piece of integument only. The Friar's balsam fulfils several indications; it excludes air, stimulates the wound, removes offensive odours, and acts as a firm splint. The injured parts should be cleaned, and nicely replaced; a piece of lint neatly wound round the finger, and saturated with the tincture. In a short time it becomes firm, entirely excluding the air, and acting as a support. Recently, I read an article in the *Paris Journal of Practical Medicine and Surgery*, strongly recommending a simple tincture of benzoin.

III. AN EXTEMPOREANEOUS MODE OF PREPARING EMLASTREUM LYTTE. This merely consists in mixing with the palette-knife, on a slab, equal parts of the resin cerate and powdered cantharides; remembering that it must be spread thinly on the adhesive plaster, as it is more readily melted, and would run, if too thickly put on. It may often happen that a country practitioner wants a blister in a hurry, and suddenly finds himself without the *Pharmacopæia* prepara- tion. This is a very ready substitute, and equally effective.

IV. LIQUOR POTASSÆ AS A SOLVENT FOR THE GUM- RESINS. Alkaline preparations of the gum-resins, and other substances closely allied to them, are no novelty. Thus we have spiritus ammoniæ fetidus in the *London Pharmacopæia*, and in *Beasley's Formu- lary*, a tincture of gamboge with ammonia, and another with carbonate of potash. But I wish to bring before your notice the solutions in liquor po- tassæ, which recommend themselves for their elegance and economy; while, as far as my experience goes, they are generally very effective, and perhaps equally so with other preparations of the same drugs. I will exhibit the preparations and their dilutions to you. (Mr. Morris here mixed the several solutions with water, in each instance producing a clear and thoroughly combined mixture.) And you will observe that even the dilution of liquor potassæ and ammoni- acum is clear, whereas a tincture produces an opaque mixture with water. The solutions of aloes, catechu, and kino are very cheap and elegant colouring mat- ters, a few drops giving a deep tint to half a pint of water.

The quantity of liquor potassæ best adapted for each gum-resin will be found to be as follows.

Aloes—1 part to 15 liquor potassæ.

Ammoniacum—1 part to 4 liquor potassæ.

Assafetida—1 part to 10 liquor potassæ.

Catechu—1 part to 10 liquor potassæ.

Guaiacum—1 part to 7 liquor potassæ.

Myrrh—1 part to 5 liquor potassæ.

Opium—1 part to 10 liquor potassæ.

V. CAMPHOR-WATER AS A SOLVENT OF THE SALTS. Most of us are aware how much more convenient it is to measure a liquid than to weigh a solid; hence many keep the saline medicines, or some of them, in solution. Now, many of these solutions are very bad keepers. I recently discovered a very simple mode of keeping them well. It is merely to substitute aqua camphorata—*id est*, a saturated solution of cam- phor in water; and, although such a minute quantity is held in solution by water, yet in some cases the greater part appears to be displaced by the saline. Probably the mere placing a piece of camphor in the solution, which has been previously made with pure water, would be equally good.\*

VI. TINCTURE OF MYRRH AS A VEHICLE FOR CREA- SOTE. I have found a drachm of tincture of myrrh to hold in permanent solution eight or ten minims of creasote in a half-pint of water; and this answers

\* Since reading this paper, I have proved such to be the case.

better than anything else which I have tried. The addition of myrrh is generally no drawback; as, when administered internally, it increases the tonic effect of the creasote, and when externally, the antiseptic.

VII. THE NUMBER 60 USED AS A LEAST COMMON MULTIPLE. I now wish to direct your attention to the fact of the great proportion of lesser numbers, and therefore of corresponding fractions, contained in the number 60. For instance: 1 or 1-60th; 2 or 1-30th; 3 or 1-20th; 4 or 1-15th; 5 or 1-12th; 6 or 1-10th; 10 or 1-6th; 12 or 1-5th; 15 or  $\frac{1}{4}$ ; 20 or  $\frac{1}{3}$ ; 30 or  $\frac{1}{2}$ . The practical application of this circumstance, which I wish to suggest, is the solution or maceration of a drug in sixty times as much of the menstrum, whereby we can easily apportion a dose, as indicated by the foregoing fractions; and as, in pharmacy, sixty grains constitute a drachm, sixty minims a fluid-drachm, sixty drachms equal seven ounces and a half, and sixty fluidounces are three imperial pints, or sixty ounces are five troy pounds, the calculation is easily made.

VIII. ON THE MORE PERFECT REGISTRATION OF THE CAUSES OF DEATH. It is hardly necessary to insist upon the fact, which is so notorious, that this registration is at present very imperfect. I would suggest: 1. That the medical attendant should always receive a small fee for the certificate; 2. That, in all cases not attended during life by a regular practitioner, an inquest be held and a *post mortem* examination made, if by the usual attendant it be considered necessary; 3. That no opinion as to the cause of death, given by any but a registered medical man, be deemed sufficient.

#### BENGAL BRANCH.

ADDRESS IN MEDICINE: THE PRESENT STATE OF THE MEDICAL PROFESSION IN BENGAL.

By S. GOODEVE CHUCKERBUTTY, M.D.

[Delivered February 24, 1864.]

MR. PRESIDENT AND GENTLEMEN,—I rise, with a full conviction of my own inability, to perform a task of vast magnitude. I feel that, in offering to address a body of gentlemen so highly educated as those before me, I have promised an undertaking far beyond my power, especially as the subject I have selected is the *Present State of the Medical Profession in Bengal*. I must, therefore, crave your indulgence while I speak, and beseech you to overlook my many deficiencies.

In considering the question before us, I think it best to state at once that I shall, in the first instance, give a slight sketch of the condition of the profession prior to the foundation of the Calcutta Medical College; next, its actual state now; and thirdly, the measures required for its improvement and reformation.

Those who remember the state of Medicine in Bengal some thirty years ago, will easily recognise the great changes which have taken place since that epoch in the science and practice of physic. The medical education of those days scarcely deserved that name; as a general rule, the profession being claimed as a birthright by certain castes, who handed it down from father to son as a matter of inheritance. Every *Boydo* was a born *Koberaj*, who required only to feel the pulse and to administer drugs, to proclaim himself a physician, without the ceremony of an examination. To be born in the caste was considered a divine warrant that he needed no diploma to establish his claim. Right or wrong, ignorant or learned, he was a *Koberaj* because he pleased to be one. And who could dispute his title, when the custom of ages had secured it to him? To suppose that

a *Boydo* could not be a physician, unless he passed an examination, was to question the ruling of Menu; and the anger of God was sure to be aroused by such a gross act of impiety. The *Boydos*, however, were not the only people who practised medicine. A low caste of Brahmins also arrogated to themselves the same right, and, besides, plied the art of *Ticcadars* (inoculators), as the inoculation for the small-pox was attended with religious solemnity. It was the commonest thing, in the days I am speaking of, to see these *Koberajes* going about the villages, each with a brass case in his armpit, well furnished with reed-phials filled with drugs of different kinds; and, as they went from house to house, they dealt out these drugs to their patients, giving particular directions as to whether they were to be taken with the juice of the *Toolosi*-leaves, *Bael*-leaves, rhizomes of grass, or long pepper. Drastics and tonics were the most in request; next, *Patchuns* (compound vegetable infusions); thirdly, powders, pills, and oils, some of which were the most expensive and difficult to prepare; fourthly, ointments, fumigations, and cauteries; fifthly, pastes and cataplasms; and lastly, poisons in hopeless cases of all kinds, especially fevers with cerebral congestion. But the grand reliance of the *Koberaj* was placed on the regulation of the diet and clothing, and the entire prohibition of baths, exercise, and free air. Fasting, as a general rule, was rigidly enforced during the first days of all acute diseases; nay, it was often prescribed even in the last stage of prostration and in chronic cases. The water was always ordered to be boiled before being drunk, except when it was employed as a diuretic or refrigerant in combination with sugar or milk. The chief food of the patient commonly consisted of *Batasha* (sugar-puffs) and water, *Khoe* (rice fried in the paddy), conjee, conjee mixed with the gravy of some vegetable or fish curry; and lastly, rice and dall. As to stimulating food or drink, nothing of the kind was allowed. Even milk was ordinarily excluded from the dietary of the sick, except after taking certain poisons. The person of the patient was always to be carefully clothed, so as to prevent all contact with fresh air; but when there were heat and burning, it was to be stripped naked and strongly fanned. Change of scene and climate was seldom resorted to, and sea-voyages never.

But, while the mass of the *Koberajes* were ignorant men and little respected, in fairness I am bound to confess that there were some among them well instructed in the *Shastras*, and highly popular. Such names as Ramdullub Sein and Nilamber Sein were widely known, and they were reported to have effected extraordinary cures. The latter of these gentlemen, I remember, attended a patient now more than thirty years ago, and it was curious to see how the villagers flocked around to have a sight of him all along the road. The case was then in the last stage of dysentery; and so, finding that he could do nothing in the way of cure, he boldly foretold the day and hour of death, which proved to be correct.

But, though the *Koberajes* were mostly *Boydos*, or low caste Brahmins, the surgeons were nearly all barbers (*Napits* or *Hajams*). The *Koberajes* were ready enough with their nostrums whenever these were required; but with the lancet they durst not trust themselves. On the contrary, the barbers were in the constant habit of handling sharp instruments, and so thought no more of cutting a boil than shaving the head. Of human anatomy they were utterly ignorant; consequently, their surgery was of the rudest kind, and went no further than the treatment of boils, wounds, bruises, and ulcers. Fractures and dislocations were left to the tender mercies of old women, who tried to reduce them by persevering friction of the parts. In midwifery, again, it was



the women of the lowest grade who were called upon to help; for the business was looked upon as unfit and degrading for men. The knowledge of these crones was on a par with their social rank; for, beyond tying the navel-string and carrying off the soiled linen, their practice generally did more harm than good.

The barber-surgeons, however, knew the use of some ointments, and firmly impressed on their patients the necessity of thorough and frequent ablu-  
tion. Although most of them confined themselves to the practice of surgery, some few did at the same time prescribe physic, to the no small annoyance of the orthodox *Koberajes*. Hence, though the brass case in the armpit was the sign of a *Koberaj*, it by no means always followed that the bearer of it was a *Boydo* or a *Brahmin*. Indeed, practically, in most cases, there was no perfect line of demarcation between surgeons and physicians; the fact being, that each man professed, according to his taste or convenience, what we would now call a medical or a surgical branch, or one or more of each. Thus, besides the *Koberajes*, barber-surgeons, *Ticcadars*, and midwives, there were a host of specialists. There were itinerant eye-doctors, who went about to perform the operation of extraction for the cataract; itinerant phlebotomists, who bled for all sorts of pains and aches; itinerant lithotomists, who cut for stone in the bladder; itinerant cuppers; itinerant leech-men; itinerant devotees, who sold all manner of charms and amulets for the prevention and cure of diseases; itinerant exorcisers, who pretended to cure hysteria, mania, and epilepsy, by expelling evil spirits; *Ojhas*, who professed to extract the venom from poisoned wounds by charms, incantations, and religious mummeries; priests of Hindoo temples, who advised penance and money-gifts to particular idols, who, they said, had the power of effecting miraculous cures; cauterisers, who used the *gool* (burning coal) and red-hot iron for chronic disorders; acupuncturists, who would puncture the enlarged spleen and liver; issue-men, who would make large issues on the legs and arms for all diseases of plethora; women-doctors, for complaints connected with the generative functions; travelling aurists; tooth-extractors; and so on. All these men, ignorant and narrow-minded as they were, had a certain amount of dexterity in their different callings, which, no doubt, was the result of repeated practice. It does not appear that they ever attempted to tie a bleeding vessel, or to use internal injections; though, in cases of obstinate constipation, they often introduced into the lower bowel a *Pawn-stalk* or oiled *brinjal*, to procure alvine evacuations. Cholera, small-pox, and other diseases of the epidemic class, which they could not manage, they ascribed to the anger of some god, which they tried to propitiate by vowing sacrifices, by presents and gifts to the *Brahmins*, by growing the hair and finger-nails, and by *Poojahs* celebrated with feasts and *Kobees* (singing-matches), and the noisy music of gongs, cymbals, shell-trumpets, and *tom-toms*. Infants afflicted with convulsions they exposed in wicker-baskets suspended from some lofty tree, and there left to perish of hunger and cold, under the mistaken idea that they were possessed, and that it was unsafe for the household to keep them any longer. It was a most revolting spectacle, to witness these wretched creatures screaming and writhing for want of food, and grown-up men and women coldly looking on without daring to approach them.

This was the case with the Hindoos. But the Mahomedans had their *Hakeems*, who administered physic and bled for all manner of complaints; and *Jurrahs*, who exercised the practice of surgery. Unlike the Hindoos, their forte was to feed the patient well, and to

practise frequent depletions, with the view of renovating the blood, and purifying it at the same time from all kinds of corruptions. With them, periodical bleeding was the order of the day; and no sooner a man complained of a little backache, heaviness of the head, or inclination to itch, than it was thought high time to resort to the operation at once. These men, too, were sometimes good oculists, although their instruments were of the rudest manufacture.

As was to be expected from the great mass of ignorance and error which pervaded the ranks of the profession, the results of treatment were most unequal and unsatisfactory. Where one man was cured by the remedies employed, hundreds were hurried to the grave by utter inanition, by the exhibition of violent poisons, or by sheer ignorance, or crippled for life by excessive salivation or by the loss of some vital organ.

To use the words of Dr. H. H. Goodeve, in his introductory lecture to the students of the Calcutta Medical College, delivered in the year 1848: "Whatever may have been the degree of success with which the study of medicine was pursued in this country in the days of its ancient magnificence—and we have reason to believe that our art had then attained to very great eminence among the Hindoos—nearly all traces of this learning have long passed away. A very few years since, the native practitioners of medicine knew little more of the science they professed than a routine acquaintance with the properties of certain drugs, which they used empirically; or, if they pretended to give an account of their treatment, and assigned reasons for the exhibition of their nostrums, their pathology and their therapeutics alike were a farrago of unintelligible nonsense, compounded of ignorance and pedantry. Fortunate indeed was the patient whom they contented themselves with treating by simple and harmless medicines, commingled though these often were of fifty or even a hundred ingredients. They possessed, and very frequently employed at haphazard, most potent and deadly drugs, the baleful effects of which too often proclaimed their poisonous character, and the culpable ignorance which had dictated their administration."

"Of surgery, they were, confessedly and most lamentably ignorant. The simplest wound, the most trifling accident, which the commonest knowledge of anatomy and the most ordinary principles of treatment would have sufficed to relieve in a few minutes, in their hands often became fatal to the sufferers, or terminated in a permanent and distressing deformity; whilst the diseased structures, now so rapidly removed by the skilful management of the educated surgeon, were to them hopeless maladies, which they dared not handle, or which became infinitely aggravated by their mischievous interference."

"Of the obstetric branch of the profession they were, if possible, still more fearfully uninformed. It is impossible to conceive anything more dangerous or ill adapted than their regulations of the lying-in room. Where the labour was most natural, their interference was beyond anything injurious and inhuman, aggravating the sufferings of the woman tenfold by their absurd and cruel directions, and often sacrificing the lives of the mother and her infant, where nothing more was needed than permission for Nature to work out her own arrangements without interruption from Art. On the other hand, in cases where human aid, properly directed, would be invaluable, they were paralysed, and incapable of affording the least assistance. Prayers and charms were their only resource, and the woman died undelivered; or if the child, alive or dead, were expelled, the mother was permitted to expire, without an effort being

made to save her, under the influence of some of those fearful accidents which not unfrequently attend upon parturition in all countries."

In such a state of things, was it to be wondered at that the practitioners of our art, as a class, commanded no respect, and but little confidence? Even the highest of them were treated with so much social contempt, that no orthodox Brahmin would eat or drink any article of food polluted by their touch. In favour of drugs alone, a dispensation was allowed by universal and time-honoured custom; for it was said these could never be so corrupted, nor did it matter if they consisted of substances of an usually forbidden nature.

European practice was then, as yet, but little known in the country. The Government, however, had not been altogether idle to improve matters in this respect, as will appear from the following extracts from Dr. W. C. B. Eatwell's introductory lecture in 1860. "It was not until the year 1822 that the English Government made any systematic attempt to impart medical instruction to the natives of this country, and it was then only to those who were destined for employment in subordinate positions in its service. Previous to that time, natives of the country had been trained in the different hospitals, under European superintendence, as native doctors (as they were termed), and in this matter had become acquainted with the general aspect of disease, and with the European modes of treatment; but they obtained no systematic education, and could not be regarded in any other light than as trained hospital assistants. In 1822, the Government established a medical school, called the Native Medical Institution for Training Native Doctors. The school was placed under the control of an European medical officer, who was aided by native assistants. Dissection of the human body was not, however, attempted; and the only practical information on this subject was obtained from the dissection of the lower animals, and from the *post mortem* examinations of persons dying in the General Hospital of Calcutta, which the students of the Native Medical Institution were permitted to witness. In the year 1826, a further effort was made by Government to extend medical education by the institution of a medical class at the Calcutta Sanscrit College, and by a similar class at the Calcutta Madrisa."

In these latter institutions, however, the ancient Hindoo and Mahomedan works were taught, along with certain elementary treatises on anatomy, surgery, and medicine, translated from the English language, or composed for the purpose in the vernacular.

All these efforts were, however, of little avail, and the result obtained was far from satisfactory. Nor did the influence of the English doctors count for much in those days. It was only in the Presidency and in the larger towns that they were to be found. Those were the days of free depletions, violent purgatives, and exhausting salivations, the dread of which, along with the absence of an appreciative native public, tended to circumscribe materially the benefits of European modes of treatment. But, granting all the praise and honour due to our hard-working and intelligent predecessors, the European medical officers were at best only birds of passage, and could not, therefore, permanently improve the position and prospects of the profession out of the service. Independent European medical settlers there were none; nor did there exist then in the country any proper means of instruction for the East Indian youth on the European model.

Such was the state of the medical profession in this country immediately before the foundation of the

Calcutta Medical College. The native members of it were all unqualified men, totally ignorant of the modern sciences, and, if learned at all, it was only in the ancient lore of the Hindu and Mahomedan schools, which taught no practical anatomy, physiology, nor chemistry, and were replete with errors and fanciful ideas of all kinds. The European members almost all belonged to the Government service, and wrote and spoke in a foreign tongue, which, from the number of technical terms they made use of, presented formidable difficulties to all uninstructed persons. The opening of the classes of the Calcutta Medical College in February 1835, however, set on foot a mighty revolution, the fruits of which have been ever since benefiting the land by making every year scientific medical aid more and more accessible to all classes of the population. At first, education was conveyed entirely in English, which in a short time succeeded in breaking down the antiquated prejudices against human dissection and practical midwifery, and in preparing a class of native medical practitioners well grounded in the study of rational medicine. In the year 1838, an additional class was formed in Oordoo for the instruction of native doctors; and in 1852 was effected the opening of a third class, to be taught in the Bengali language.

[To be continued.]

## Reviews and Notices.

GLAUCOMA, AND ITS CURE BY IRIDECTOMY. FOUR Lectures. By J. SOELBERG WELLS, Ophthalmic Surgeon and Lecturer at the Middlesex Hospital. Pp. 86. London: 1864.

THESE lectures have been published by Mr. WELLS in order to give an account of the modern doctrine of glaucoma. "The great interest," he says, "which has been lately excited in the profession by the controversy which has appeared in the BRITISH MEDICAL JOURNAL, as to the beneficial effects of iridectomy in glaucoma, has led to the expression of a wish in several quarters, that a short and practical treatise should be written embodying an account of the modern doctrine of glaucoma." To meet this want, Mr. Wells gives us these short, pithy, and practical lectures.

Lecture I contains a short history of glaucoma; and the premonitory symptoms of acute glaucoma. In Lecture II, the symptoms of acute glaucoma are described; and so, also, those of chronic inflammatory glaucoma. In Lecture III, glaucoma supervening on cataract is treated of; the doctrines touching the nature of the disease; the ophthalmoscopic signs, etc. In Lecture IV, we have an account of the prognosis of glaucoma; the beneficial effects of iridectomy described, and the mode of performing the operation.

We can safely recommend a perusal of these lectures to any one who desires a good and condensed account of this very interesting subject. Mr. Wells, we need hardly add, regards the matter from the point of view of the school of Von Gräfe and Bowman.



## Scientific Notes.

**GROWTH OF PLANTS IN DARKNESS.** M. Boussingault in a memoir, brings forward several experiments which prove that the growth of a plant in the dark is supported entirely at the expense of the seed. Under the influence of air and moisture, in a soil deprived of manure, a plant in the light assimilates carbon, and, at the same time, fixes hydrogen and oxygen in the proportions to form water. In the dark, on the contrary, carbon is eliminated, and so are hydrogen and oxygen also in the proportions to form water.

**CONICAL HAILSTONES.** M. Barral lately sent to the Academy of Sciences a note on a curious form of hailstone he observed in Paris on the afternoon of Easter Tuesday. The stones were of an absolutely conical form. The Editor of the *Chemical News* says that, in passing through St. Paul's Churchyard about four o'clock on the same afternoon, he picked up at least a dozen of perfect cones, some of them three-quarters of an inch high and half an inch broad at the base. This form of hailstone, M. Barral says, has never before been noticed by meteorologists. M. Barral observed traces of crystallisation in the structure of the stones he saw, and says they were very hard. Those we (Ed. *Chemical News*) picked up were quite soft, and looked like moulded snow, and we remarked no trace of crystallisation.

**ARTIFICIAL PRODUCTION OF MONSTERS.** A series of experiments have been made by M. Barthelémy on monstrosities, both artificial and natural, among the lepidoptera. He performed his experiments chiefly on the chrysalis, and endeavoured to cause modifications similar to those obtained by covering the eggs of birds with varnish. On covering the chrysalis with oil, it was found that they died before completing the metamorphoses; but on covering either the thoracic or abdominal part with wax, a retardation of development was perceived, but this was much greater with the thoracic parts. The cephalic part of the nervous system was much retarded in development, but the other parts of the ganglionic chain appeared to be developed as usual. He succeeded also in suppressing the development of the generative organs.

**TRANSFORMATION OF COAGULATED ALBUMEN AND CASEIN INTO A SOLUBLE ALBUMEN COAGULABLE BY HEAT.** M. Schutzenberger has obtained a curious result by dialysis. He dissolved pure coagulated albumen in as little potash as possible, and treated the albuminate of potash with an excess of acetic acid. The mixture was then dialysed, and as soon as the inner liquid showed no acid reaction it was examined. At first it was clear, but it soon became opalescent. Heat coagulated the albumen; so did mineral acids, and, strange to say, so did alkalies and neutral salts. This happened also with uncoagulated white of egg, which was acidulated with acetic acid and then dialysed. Solutions of casein in hydrochloric acid, after dialysation, gave similar results.

**CONVERSION OF SALT MEAT INTO FRESH.** Mr. A. A. Whitelaw thus describes the process. The salt meat is placed in a dialytic bag made of untanned skin, or other suitable material, and the bag filled nearly, but not quite, full of brine from the beef barrel. The dialyser is then placed in sea-water, and the process allowed to go on for several days, till the

meat and brine are sufficiently fresh for use, or till the brine in the dialytic bag is within 1° or 2° of Twaddle's hydrometer of the same strength of sea-water. In this way, as the brine becomes freed from salt, the beef, which, by the action of salt, has been contracted, gives its salt to the brine in the bag, and so the process goes on, the beef expanding like a sponge, and gradually taking up a great part of the natural juice that it had previously lost in the salting process. In this way no loss of juice is sustained by steeping, and the brine left in the bags, after a nightly dialysis in fresh water, can be used for soup. Thoroughly salted beef, without bone, takes up nearly one-third its weight of juice, and this absorption takes place gradually as the strength of the brine in the dialyser becomes reduced. Meat thus treated—being, in fact, fresh meat—may be cooked in a variety of ways that are obviously not available for salt meat; and so the food of sailors, and, consequently, their health, may be improved. (*Chemical News*.)

**MATURATION OF FRUITS.** According to MM. Frémy and Decaisne, there are three stages in the existence of a fruit. In the first stage, that of development, the fruit is green, decomposing carbonic acid in solar light and evolving oxygen. In the second stage, that of ripening, the green colour changes to yellow, brown, or red; the fruit then transforms the oxygen of the air into carbonic acid, which is produced in the cellules of the pericarp in consequence of a series of slow combustions, in which the immediate soluble principles disappear. Tannin goes first, then acids, and afterwards sugar. In the third stage, that of decomposition, the effect of which is the destruction of the pericarp and the liberation of the seed, air enters the cellules, sets up the alcoholic fermentation, and the acids of the fruit give birth to true others. Finally, it not only decomposes the cellules, but it oxidises certain immediate principles which have resisted the changes in ripening. (*Chemical News*.)

**FOSSIL MAMMALIA IN IRELAND.** At a meeting of the Dublin Geological Society, Mr. Scott brought forward a catalogue of the fossil mammalia hitherto discovered in Ireland. The animals were about sixteen in number. The mammoth was found in three places—Belturbet, Shandon, near Dungarvan, and also at Whitechurch, near the same town. A hippopotamus tusk was found by a Mr. Doran near Carrickfergus. The remains of the horse and pig did not differ materially from those of the present day. The pigs' skulls showed that the animals had been killed with a pole-axe. The subject of the races of oxen has been repeatedly brought forward by Sir W. Wilde. The largest species, *Bos primigenius*, had not yet been found in Ireland; but two other species, *B. frontosus* and *B. longifrons*, were abundant. A head of a bull of each of these two species was on the table, that of the former exhibiting the mark of the pole-axe or stone hammer in the forehead. The specimens of fallow deer Mr. Scott considered to be those of park animals, recently drowned in bog holes, etc. With regard to carnivora, the paper contained the history of seven skulls of *Ursus arctos*, the brown bear of Europe, and also a notice of two milk-teeth of a young animal of this species recently discovered at Coole Park, county Galway. A few bones of the cave bear, *U. spelæus*, were found at Shandon, with the mammoth; and some bones of the Polar bear, *U. maritimus*, were found in a collection of bones sent from Lough Gur. The remains of wolves and dogs are stated by the best authorities to be almost undistinguishable the one from the other; and, as the date of the extinction of wolves is so recent as 1710, it is difficult to decide whether the remains found at

Dunshaughlin and elsewhere are those of wolves or dogs. Mr. Scott mentioned some council orders of Cromwell's time, dated 1652 and 1653, forbidding the exportation of wolf dogs, and offering £6 for a she-wolf and £5 for a dog-wolf, in consequence of the number of children of vagrants killed by these animals. The cetacean remains discovered were detached bones of the smaller cetaceans, which might, perhaps, be very recent.

**ALCOHOLIC FERMENTATION.** M. Béchamp remarks that two orders of ferments exist; one soluble, and therefore not organised, of which diastase may be taken as the type; the other organised, and therefore insoluble. The action of the former is invariable and specific; that of the latter, in a chemical point of view, is essentially variable, like that of all organised beings. The so-called fermentation of cane sugar set up by beer yeast is thus explained. The yeast plant first of all transforms cane sugar into glucose outside itself by means of a product which it contains ready formed in its organism, and which the author calls *zymase*; the plant then absorbs the glucose, digests and assimilates it, grows and multiplies, and finally throws off the used parts of its tissues in the form of the numerous compounds known as the products of fermentation, just as human beings throw out their waste in the form of urea, etc. According to this theory the alcohol, etc., must come from the yeast, and should be obtained from yeast perfectly free from glucose, which the author's experiments prove does in fact furnish alcohol. M. Béchamp found also that the *Mycoderma Aceti* in contact with cane sugar yielded alcohol, which it is thus seen may be formed without sugar by yeast, and with sugar by another organism similar to yeast. Hence it is clearly impossible at present to express the so-called fermentation changes by an equation. The author considers them as a series of transformations which take place simultaneously or consecutively, and which may some day be individually explained by an equation comparable to that which expresses the change in starch under the influence of diastase. (*Chemical News*.)

**THE SUN.** According to Professor Helmholtz, the light of the sun has been shown to exceed that of the Drummond 146 times, and that of the electric lamp three or four times. In reference to heat, Pouillet had demonstrated that the quantity of heat emitted by one square foot of the surface of the sun during one hour is equal to the heat produced by burning 1500lbs of coal, equivalent to 7000-horse power. The cause of the solar heat could not be due to "chemical action," since a mass of oxygen and hydrogen, giving water by combustion equal to the mass of the sun, would be heated to 3777 deg. cent., a heat which would be exhausted in three thousand years. In regard to the sun having an original store of heat, it had been reckoned that it would cool  $1\frac{1}{4}$  deg. cent. every year if of a capacity like water, a diminution that would not be much felt in four thousand years. Professor W. Thomson has proved that the heat could not be brought to the surface by conduction, but possibly by convection. Another theory is that new heat is produced by condensation. If a contraction of the sun took place, diminishing its diameter by a ten thousandth part, it would give heat sufficient for 2,289 years; and, if the same contraction were to go on till its density equalled that of the earth, the heat would be sufficient for 16,700,000 years. Another hypothesis ascribes the heat of the sun to the force of gravitation, through meteors falling into it. These bodies swarm in the interplanetary space, and, coming to the earth with great velocity, are heated in our atmosphere by friction, exploding, and sometimes

setting fire to buildings. Calculation gives for the fall of 3000 ft. 1000 deg. cent.; for 14 to 20 miles 900,000 to 2,500,000 deg.

## British Medical Journal.

SATURDAY, JULY 23RD, 1864.

### THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE position in which the Royal College of Surgeons of England now stands in face of the profession is plain and transparent. It has been shown, in the most unanswerable manner, that its affairs are grievously managed—in a way which admits of no justification. We know, indeed, of no one, either in or out of the Council, who at this time of day has ventured to come forward and justify the College system.

It has been shown, that the reforms which were the chiefest intentions of the new Charters have been carefully eluded by those whose duty it was to carry them out; and that the very abuses which these Charters were meant to remove are still in active operation.

It has been shown, for example, that the office of Examiner, by a constant system of re-election, has been hitherto made a life-appointment; although the Charter of 1852 made the office quinquennial, and was obtained for the express purpose of preventing the office from being held for life.

It has been shown that the Council had powers given them for the express purpose of enabling them to elect Examiners from out of the general body of Fellows; and shown, also, that they have never in one single instance obeyed the injunction of the Charter.

It has been shown that the constitution of the Council is most faulty and anomalous, and such as has naturally led to the doing and to the perpetuating of the abuses complained of.

It has been shown that the Court of Examiners, who are nominally elected by the Council, virtually elect themselves into office; that they elect themselves to the highly lucrative office of Examiners; and, as we have said, despite the explicit intention of the Charter, have never permitted any one who is not of themselves or of the body—the Council—over which they rule supreme, to participate in the honours and emoluments of office.

It has been shown that the influence of the Court of Examiners, although itself is nominally elected by the Council, is supreme in Council; and that in consequence, as things are managed, no Councillor has any chance of obtaining the sweets and riches of an Examiner's office, who makes himself obnoxious to



the Court of Examiners—who does his duty as prescribed by the Charter.

It has been shown, again—is, indeed, a notorious and admitted fact—that Fellows seek to enter the Council, not for the sole purpose of performing the proper duties of a Councillor's office—viz., of directing and presiding over the affairs of the College—but mainly that they may thereby enter the portal which, under the misdirection of the Council, has been hitherto the only entrance to the Court of Examiners.

It has also been shown that, through the improper influence of the Court of Examiners within the Council, the voice of honest reform is stifled, and the most flagrant abuses of power are perpetuated. In so far, men enter the Council in order to become Examiners; they naturally, as Councillors, trim their sails to go in the direction which alone can lead to the haven of their hopes; and this direction is of necessity the path which is pointed out by the Court, and which, therefore, leads to the perpetuating of the present system. And, as the present system exists solely on the perpetuating of abuses, the Councillor soon learns that to destroy existing abuses would be to kill the goose which shall lay for him (he hopes) that golden egg, an Examiner's office.

All this most vicious circle of College doings we have again and again laid before the eyes of the profession. We have demonstrated the vice—the radical vice—of its constitution. We have shown the outrage on common sense and common justice involved in the condition which allows Examiners to be of the Council, and so virtually to elect themselves to office. We have shown the utter disregard to the plainest objects and intentions of the Charters of 1843 and 1852. We have shown that, by following out the traditional system, the grand purport of these Charters, the very objects for which they were obtained, have been completely evaded; and that all the evils, for the removal of which these Charters were expressly obtained, are at this moment in as vigorous operation as they were in those other days when the College was so mercilessly castigated by the pen of Mr. William Lawrence.

All this sounds like the tale of a great scandal. But, if we have told it, not ours is the fault. What hope presents of any change to better things, if the pressure of professional opinion be not brought to bear upon the Council from without? Those few men in Council who have ever attempted to break the spell of old and obsolete practices there have utterly failed. To throw the force of public opinion upon these things, therefore, becomes the duty of the honest journalist.

With this intent, we therefore now call upon those gentlemen who have been of late years elected into the Council to remember the terms upon which they were elected. They were sent to the Council, not

for the purpose of working their way to an Examiner's seat, but to carry out the principles of the Charters of the College. They were sent to the Council, not to do themselves, but to do their College, service. We, therefore, publicly ask those gentlemen to redeem the pledges which they tacitly accepted when they entered office. Their path of duty is most clear. Nothing less than the sacrifice of duty to self-interest can lead them astray from it. They must see, and in their consciences acknowledge as strongly as we do, the evils of the system which they are now called upon to direct. Will they sit quiet there, and allow themselves to fall away and slide into the old groove?

Their duty and the work are plain enough. Let them strike at the very heart of the evil. A new Charter must be had. Country Fellows must vote by proxy. Examiners must not sit on the Council. No Examiner must hold office for more than five years. The Council shall rule the Court of Examiners, not the Court the Council.

To effect all these reforms, a new Charter is indispensable. Let the new members of Council insist on the procuring of another Charter, and in the meantime exercise the powers which they possess of striking at the root of the evils complained of. Let the new Councillors insist that the terms of the Charter, which indicate five years as the period of an Examiner's office, shall in future be complied with. Let them insist, in the interests of the College, "in the interests of science, and in the interests of the public, that the emoluments and honours of an Examiner's office shall be so distributed as to enlist and encourage the services of all the highest disposable surgical and anatomical skill of the Fellows, instead of allowing them to become partriarchal appanages"; and, in furtherance of this great reform, let them, at the very next and near-at-hand election of Examiners—i.e., when the next quinquennial period of election arrives—instead of following on in the unpardonable path of constant re-election,—let them, we say, insist that those whose term of office then expires shall not be re-elected. Let them insist that for once, and for the first time, the terms of the Charter shall be complied with, and so elect, to use the words of Sir Benjamin Brodie, "those who, there is reason to believe, are the best qualified for the office, whether they are the younger members of the body, or the older ones." Let them have ringing in their ears the words of that man who showed himself so virtuous and so true when he held office in the College: "The mode of electing Examiners ought not to be that which it is at present. The Examiners are now appointed according to seniority, or nearly so." Let them remember that these words of Sir B. Brodie were spoken thirty years ago, and yet that the very evils which he so condemned are still in as vigorous operation as they ever were. Let them remember

the words of Mr. Lawrence, spoken thirty years ago before the Committee of the House of Commons: "I think that many competent Examiners might be found between the age of 25 and 36; and, if men of sufficient eminence could be found younger than 36, I see no objection to their being Examiners."

In another number, we shall inquire into the results of this system; *i. e.*, we shall examine the present constitution of the Court of Examiners.

### LORD DE GREY AND OUR DEPUTATIONS.

WE regret to say that we have given Lord de Grey more credit than he deserves in the matter of the Army Medical Service. We now learn that the rumour to which we gave currency in a late number of the JOURNAL, that Lord de Grey had appointed Sir James Clark, Dr. Sutherland, and Dr. Parkes, a committee to consider the present state of the army medical departments, is not correct. The opinions of these gentlemen, as of others, have been asked, it is true; but no committee has been formed for the purpose indicated.

All this only makes the matter still worse. It now appears that Lord de Grey had an interview with the three gentlemen above named before he received the deputation; and, consequently, his opinion was already formed before he saw the deputation. Assuredly he held out no hopes of better things for the army surgeon; and it is hoping beyond hope, therefore, to expect from him any assistance in the matter. We do not doubt for a moment that the three gentlemen whom he consulted pressed upon him the very things which were urged by the deputation. Lord de Grey, therefore, required no time for any deliberation in responding to the deputation; and we must again repeat that, as he promised nothing at the moment, nothing can be reasonably expected from him. More strongly than ever, consequently, must we urge upon the profession the advice which we gave last week, *viz.*, that in ourselves, and through the aid of public opinion, must we seek for help. If the waggoner will not put his own shoulder to the wheel, there is little hope that the Olympians will come out of their way to give him a lift. The lesson which we have so often urged upon those who seek poor-law medical offices, is the very lesson which we would urge in this case. There is no aid to be expected for the army medical officers, except that which is obtained by the determination of the profession. It is now as clear to us as figures can make a sum, that, so long as the Horse Guards can get men to do the medical work of the army on its own terms, so long will it continue to do so. Lord de Grey will clearly put no pressure on the Horse Guards; and the Director-General is evidently precisely of the opinion of His Royal Highness the Commander in Chief, *viz.*, that the third

class Netley men, and men of the style of the three hundred who have so gallantly thrown themselves into the breach, are all that can be desired for the army. Dr. Gibson, indeed, himself told the deputation so.

What may be done through an application to Parliament, yet remains to be seen; but we have no great hopes from that quarter. Our voice, unfortunately, is very weak in Parliament; and sadly too weak to make any impression on the pachyderms of office. Through the press, public opinion, and Parliament, we must, however, still continue to urge the claims of the army medical officer. But we candidly confess that, if gentlemen can be found to come forward, three hundred at a time, ready and willing,—aye, and most eager, we regret to say,—to accept office on the degrading terms proposed in the Director-General's famous advertisement, we fear there is but small hope for better things to the army medical officer. What effect can we hope to produce on the minds of His Royal Highness and the Director-General (who have so unmistakably expressed their opinions on the subject), so long as they can go to Parliament, and come before the public, and say: "Really we have no difficulty whatever in carrying on the army medical service. We have hundreds of applicants, all good men, all duly qualified, and fitted with the double license to practise medicine and surgery, *hic et ubique*. Men with first-rate testimonials, too; hundreds of applicants,—in truth more than we can oblige."

We ask our brethren what hopes are there whilst members of our profession overwhelm the Director-General with applications on his own terms? We therefore urge the profession to combine, and themselves force from authority what it now refuses to our just claims. Let our lecturers continue to dissuade their students from entering the army. Let our medical students, as they have already done on another occasion, unite in a resolve never to enter the army on the present terms of office. Let the Director-General, then, use up his precious list of the three hundred misfits; and when he has come to the end of that same, he will find himself forced to offer the terms which he now refuses. *Aide toi* must be our motto, and then we can get our terms spite of the Horse Guards, spite of the War Office, and spite of the Director-General.

MR. PAGET's letter, published in our last number, is well worthy of the serious attention of the country Fellows of the College of Surgeons. Mr. Paget, himself a Councillor, admits that the "College management" requires improvement; and that the Examiners have hitherto been elected from too stunted a range. Mr. Paget looks to the country Fellows as the agents for carrying out the reforms required;



for, as he says, Councillors drawn from their body will not pretend to the office of Examiners, by reason of the fact that they live in the country. "But," adds Mr. Paget, "I cannot hope for reform until I see the country Fellows show a higher appreciation of their duties and their powers than they have hitherto done." Certainly, by their remissness and apathy at the late election, the country Fellows seemed to say that, as far as they cared, the London Fellows might manage the whole concern, and have it all to themselves. They forget the words of the poet,

"Who would be free themselves must strike the blow."

We do not, however, for a moment believe that such is either their wish or their intention; and we attribute the failure at the last election solely to want of due and proper organisation. We, therefore, earnestly recommend the country Fellows at once to decide—for example, at the approaching meeting of the British Medical Association—whom they shall select as their country representative at the next election. It is hard indeed if seven hundred country Fellows cannot elect their man, if they have the will to do so.

MR. J. I. IKIN of Leeds has thrown out to the Committee of the Lancashire Relief Fund what seems to be a very excellent and humane suggestion. He proposes the maintaining of a ward in the Women's Hospital for the treatment of consumption amongst young females.

"Such cases," he says, "are not received into the Infirmary as in-patients; whilst we have at present at the Women's Hospital several capital wards, both large and small, unfurnished and unoccupied, merely because necessary funds to fill them are not forthcoming. £30 *per annum* would be sufficient to maintain and treat each consumptive case, exclusive of the fitting up of the wards."

WE beg to call attention once more to the nature of the services performed by *non-combatant* officers of Her Majesty's Army. Scarcely does a despatch, containing an account of any of our war-proceedings, reach us without giving similar facts. We recommend them to the consideration of those superb gentlemen at the Horse Guards, who flatter themselves that the "doctor" of the regiment is not such as they are. Lieut.-General Sir D. A. Cameron, commanding the troops in New Zealand, says;

"I must particularly mention the valuable services of Deputy Inspector-General Mouat, Surgeon McKinnon, 57th Regiment, and Assistant-Surgeon Manley, Royal Artillery, who fearlessly exposed themselves to fire in attending to the wounded, the greater part of whom fell close to the enemy's work."

It is probable the medical service is short handed there, as elsewhere, or Dr. Mouat, who is the principal directing medical officer in the colony, would not have been led to expose himself under fire in surgical duty. Surgeon McKinnon served throughout

the Crimean campaign with a Highland regiment, and through nearly the whole of the Indian mutiny campaign with Lord Clyde's head-quarters staff.

A NEW edition of the *British Pharmacopœia* must not be expected at present. If all the ill that has been said of it be true, it will take a long time to eliminate all the errors in the first edition, and fill up all the deficiencies in it. The work is, however, in hand. Mr. Warrington, Chemist to the Apothecaries' Society, is, and in fact has been for some time, engaged in the business; and will, of course, in due time (which, we hope, means some not very distant time) report to the Pharmacopœia Committee. The present Pharmacopœia Committee is a small body; and will, therefore, we trust, be able to discuss Mr. Warrington's report, when it gets the same, without any of that great delay which characterised the proceedings of the defunct Committee. As, however, the present Committee consists of gentlemen engaged in practice, we may be very sure that a long day will yet pass before the book sees the light, unless these gentlemen do what we should strongly recommend them; viz., throw the whole business and responsibility of the editing on the shoulders of some one capable pharmaceutical chemist. Economy would thus be consulted, and all the advantages which necessarily result from unity of design and concentration of purpose and individual responsibility be obtained. Never was a better illustration of the old fable of "too many cooks spoiling the broth," than in the case of the *British Pharmacopœia*. However, *nil nisi bonum de mortuis*.

At the late dinner of the Fellows of the College of Surgeons, the President of the Medical Council, Dr. Burrows, sincerely hoped that the Medical Council would stop all its idle talk, and would propound a plan of education worthy of the whole profession. Mr. Arnott, on the same occasion, proposed the health of the Medical Council. He apologised for the defects of the *British Pharmacopœia*; and we think he should have also apologised for the defects of the Medical Council. A scheme of education, he said, was under the consideration of the Council—a fact which we all only too well know; and, he might have added, has been so for any time these six years. When the scheme would be propounded he told us not. Mr. Arnott does not like the idea of the Council applying for more compulsory powers, in order that it may be enabled to force all corporations to adopt its scheme of education. And no wonder; for most assuredly the first body to be compulsorily operated upon would be that of the London College of Surgeons, which has distinctly set at nought the recommendations of the Council. Mr. Arnott also indignantly asked: Could it be doubted that medical corporations demanded less from their candidates

than competency to practise? We answer: Yes, it can very well be doubted; and, as regards the College of Surgeons itself, we beg to ask Mr. Arnott if he thinks the College sends forth men competent to practise medicine. Mr. Arnott knows as well as we do that there are many hundreds of men in London and the provinces, who are simply Members or Fellows of the College, the chief part of whose practice, in fact, is purely medical. Knowing this, can he say that an examination which contains no question on the practice of medicine is sufficient to make Members of the College competent to practise medicine? But, more than this, inasmuch as the Medical Council recommends more study than the College requires, it is certain that the College of Surgeons, in the opinion of the Medical Council, does demand less than what is wanted to make men competent practitioners. Such is the logical answer we give to Mr. Arnott's query.

THE following are the terms of the Contagious Diseases Bill, just passed through the House of Commons. We will venture to say that a more iniquitous interference with the liberty of the subject has never been sanctioned by a British House of Parliament. The women whose liberty and citizenship are thus ignored belong to the degraded classes of society, and are, therefore, we suppose, treated in this Bill as persons who have no civil rights. Those only who uphold the doctrine, that it is right to do evil to obtain good, can give their sanction to such a piece of legislation as this. These unfortunate women have been treated as Indian princes treat their dancing girls—as beings who have no more rights than mere animals.

"The Bill, with amendments, has been reported to Parliament, and issued accordingly. The enactment, which is to continue in force for three years, is to have effect at Portsmouth, Plymouth, Woolwich, Chatham, Sheerness, Aldershot, Colchester, Shorncliffe, the Curragh, Cork, and Queenstown, and in the specified limits of parishes, villages, and places included in or contiguous to the towns and stations named. It will be the duty of an Inspector of Hospitals, chosen for the purpose, to supervise a system of Certified Hospitals. The authorities of any hospital, being desirous that such hospital should be certified, if, on examination and report by the Inspector of Hospitals, the hospital appears to the Admiralty and the Secretary of State for War to be useful and efficient for the purposes of the Act, it will be constituted a Certified Hospital, and will be from time to time visited by the Inspector. Power is given to withdraw this certificate, if the authorities think fit to do so, on the report of the Inspector. This system of hospitals will be utilised as follows. Any authorised superintendent or inspector of police, or any duly registered medical practitioner, can lay before a justice of the peace an information; the justice may, if he think fit, issue to the woman named a notice summoning her to appear personally, or by deputy. In the event of the person not appearing, or the matter of the information being substantiated on oath or affirmation, the justice may order the woman to be

taken to a Certified Hospital for medical examination. The woman may be apprehended for this purpose. The medical authorities of the Certified Hospital will return to the justice, within twenty-four hours, a certificate of the examination made; and on this the justice may, if he think fit, order the authorities of the hospital to detain such woman for medical treatment until discharged by the authorities. In the case of the patient refusing to submit to the examination or to the medical treatment, or to the rules of the hospital, she may be summarily convicted, and be imprisoned for one or two months."

Dr. MARKHAM, at the last *comitia*, brought under the notice of the College of Physicians the fact that the College had unknowingly been doing an act of injustice to a certain number of the members of the College. The College had in the famous, or, as some think, infamous year of grace 1859, under the impulse of a very natural indignation excited by the proceedings of another corporation or two, passed a resolution to the effect that its Registrar should not address any of its members with the title of Doctor, who did not possess a degree in medicine from some recognised University. The College had forgotten at the moment that, some twenty years previously, it had entered into an agreement to give the title of Doctor to its members, whether they possessed a degree in medicine or not. Upon these facts being brought under the notice of the College by Dr. Markham, the College at once, in the most honourable manner, admitted the error, and passed a resolution to the effect that all gentlemen who became members of the College before July 14, 1859, shall in future be addressed as doctors. We need hardly add that the College passed this resolution simply because it felt bound to carry out the engagements of its predecessors of twenty years ago. No gentleman, however, who has joined the College since July 1859, or who may in future join it, will receive such title unless he possesses a diploma from some recognised University. The College regrets the act of its predecessors, but considers itself bound to carry it out.

M. DECAISNE asserts that, in less than three years, he had observed in his practice twenty-one instances of intermittent pulse in eighty-one cases of incorrigible smokers, who had no organic disease of the heart.

The Administration of Public Assistance in Paris have forwarded to the physicians of the different hospitals a series of questions requesting their opinions on the subject of the isolation of patients in hospitals, affected with contagious diseases, and especially with small-pox. The question asked is this: "Is it necessary to treat in separate wards patients affected with acute, contagious diseases, such as eruptive fevers?"

M. Georges recommends, as a local anæsthetic, the ether of petroleum, being an excellent refrigerant, and cheap.



# Association Intelligence.

## BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

*President*—JOHN A. SYMONDS, M.D., F.R.S.Ed., Clifton.

*President-elect*—GEORGE EDWARD PAGET, M.D., Cambridge.

*All the General Meetings of the Members will be held in the Senate House.*

WEDNESDAY, August 3rd.

12 NOON. Meeting of Committee of Council in the Arts School.

2.30 P.M. Meeting of the General Council in the Arts School.

4 P.M. First General Meeting of Members. The retiring President (Dr. Symonds) will resign his office. The new President (Dr. Paget) will deliver an Address. The Report of the Council will be presented, and other business transacted.

9 P.M. The Members of the Association are invited by the Master and Fellows of Gonville and Caius College to a *Conversazione* in the College Hall.

THURSDAY, August 4th.

8.30 A.M. The Members of the Association and their friends will breakfast together in the Guild Hall. Tickets Three Shillings each.

10 A.M. Meeting of the Members of the New Council in the Arts School.

11 A.M. Second General Meeting of Members. Papers and Cases will be read.

4 P.M. Third General Meeting of Members. The Address in Medicine will be delivered by EDWARD L. ORMEROD, M.D.

The Report of the Medical Benevolent Fund will be presented.

Cases and Papers will be read.

9 P.M. The Members of the Association are invited by the Master, Professors, and Fellows of Downing College, to a *Conversazione* in the College Hall.

This day (Thursday), by the permission of the Provost and Fellows of King's College, there will be Full Choral Service in the College Chapel at 3 P.M.

FRIDAY, August 5th.

10 A.M. Fourth General Meeting of Members. A Report will be read from the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund. Papers and Cases will be read.

4 P.M. Fifth General Meeting of Members. The Address in Surgery will be delivered by G. M. HUMPHREY, M.D., F.R.S. Papers and Cases will be read.

6.45 P.M. The Members of the Association and their Friends will dine together in the Hall of Gonville and Caius College. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are requested to send notice to Dr. P. W. LATHAM, Sidney Street, Cambridge.

Members are requested to enter, immediately on arrival, their names and addresses in the Reception Room at the Guild Hall, when cards will be supplied which will secure admission to all the proceedings.

A Clerk will be in attendance at the Reception

Room, and will give information respecting lodging-houses.

The principal Hotels are the "Bull", the "Eagle", the "Red Lion", the "University Arms", and the "Hoop".

*Return Tickets* to Cambridge from London and such other stations on the Great Eastern, London and North Western, and Great Northern Railways, as usually issue them, will be granted to members of the Association producing vouchers on the 2nd, 3rd, 4th, and 5th of August, and will be available up to the 6th inclusive.

Members who wish for vouchers or for information previous to the Meeting, may communicate with Dr. P. W. LATHAM, Sidney Street, Cambridge.

*Notices of Motion.* Dr. STYRAP will move the following alteration in Law xv. To insert, after the words "One Guinea annually", "provided that such sum be paid not later than June 30th; after which date, each Member shall pay, in default, £1:5."

Mr. WATKIN WILLIAMS will move to alter Law xv, by inserting "the 1st of December", instead of "the 25th of December."

*Papers* have been promised by—

SPENCER WELLS, Esq. (London): Some of the Causes of Excessive Mortality after Surgical Operations.

SYDNEY JONES, M.B. (London):

JOHN BRIDGES, Esq. (Cottenham): Diphtheria, and some of the *Post Mortem* Appearances.

A. E. SANSOM, M.B. (London): The Action of Anæsthetics; and the Administration of Chloroform.

T. HERBERT BARKER, M.D. (Bedford): Herniotomy without Opening the Sac; with Cases.

J. V. SOLOMON, Esq. (Birmingham): The Radical Cure of extreme Divergent Strabismus.

EDWARD WOAKES, M.D. (Luton): Neuralgia.

B. W. RICHARDSON, M.D. (London): New Researches on the Pathology of the Blood.

SAMUEL MAETYN, M.D. (Clifton): The Physiological Meaning of Inframammary Pain.

GEORGE PHILIPSON, M.D. (Newcastle-on-Tyne): Intussusception.

GEORGE BUCHANAN, M.D. (Glasgow): Tracheotomy in Croup and Diphtheria.

ROBERT CHRISTISON, M.D. (Edinburgh): Medical Education.

C. H. F. ROUTH, M.D. (London): 1. The Use of the Hysterotome in Uterine Disease; 2. The Diagnosis of Early Pregnancy.

ERASMUS WILSON, Esq., F.R.S. (London): The Nature, Varieties, and Treatment of Eczema.

BALMANNO SQUIRE, M.B. (London): Occipital and Constitutional Impetigo of the Scalp.

THOMAS HILLIER, M.D. (London): Diphtheria.

HENRY DICK, M.D. (London): A New Instrument for the Treatment of Spinal Curvature.

FRANCIS E. ANSTIE, M.D. (London): Certain Points in the Treatment of Diabetes.

T. WATKIN WILLIAMS, *General Secretary*.

13, Newhall Street, Birmingham, July 1st, 1864.

## NORTH WALES BRANCH: ANNUAL MEETING.

THE fifteenth annual meeting of the North Wales Branch was held at the Black Lion Hotel, Mold, on Tuesday the 5th inst., under the presidency of W. WILLIAMS, M.D., Mold. There were also present, Drs. J. C. Davies (Holywell); E. T. Hughes (Mold); J. R. Hughes (Denbigh); J. R. Jenkins (Ruthin); O. Roberts (St. Asaph); A. E. Turnour (Denbigh); E. Williams (Wrexham); and Messrs. E. G. Clarke

(Mold); T. T. Griffith (Wrexham); D. K. Jones (Beaumaris); G. T. Jones (Denbigh); T. E. Jones (Wrexham); R. Jones (Flint); L. Lodge (St. Asaph); R. Platt (Leeswood); R. C. Roberts (Ruabon); and J. Williams (Holywell.) The following gentlemen were visitors: E. B. Vise, Esq., Holbeach, Lincolnshire and James Nash, Esq., Australia. Letters were received from R. Jones, Esq., Carnarvon; H. Rees, Esq., Llanberis; T. H. Hughes, Esq., Pwllheli; and others, regretting their inability to attend the meeting.

Agreeably to an invitation kindly made by Dr. Hughes of Mold, the members assembled at his house at 12:30 P.M., and partook of a splendid champagne luncheon; after which they met at 1:30 P.M. at the hotel. The retiring President, L. LODGE, Esq. (St. Asaph), in opening the general annual meeting, addressed a few words, expressing his thanks for the kindness and courtesy shown him, and the support he had received during his year of office. He then introduced the President-elect, W. WILLIAMS, M.D. (Mold.)

*President's Address.* The PRESIDENT delivered an eloquent address, which was much applauded, welcoming at its conclusion the members to Mold.

An unanimous vote of thanks, moved by Mr. GRIFFITH of Wrexham, and seconded by Mr. G. T. JONES of Denbigh, was accorded the President, with a request that he be good enough to publish it in the BRITISH MEDICAL JOURNAL.

*Report of Council.* At the request of Mr. KENT JONES, Honorary Secretary, Dr. WILLIAMS of Wrexham read the Report of Council.

"With the exception of one or two general subjects of professional interest, nothing particular has occurred since the last annual meeting of the North Wales Branch of the British Medical Association.

"During the fifteen years this Branch has been established, some familiar faces have passed away from us, and their places have been recruited by a goodly number of zealous and staunch supporters of the Association. The erroneous statements which, from time to time, find their way into the pages of the contemporary medical press have, hitherto, tended greatly to prevent medical men from joining our excellent institution.

"The intermediate meeting of this Branch, which was held at Holywell on March 22nd last, was well attended, and passed off with much professional interest to the members. An agreeable feature of that meeting consisted in the noble hospitality given to the members by the associates of that town, to whom your Council beg to tender their best thanks, a sentiment which, they feel sure, will be warmly reciprocated by every one connected with this Branch.

"Your Council regret to find that the General Medical Council have not succeeded in gaining the confidence and respect of the large majority of the profession. This is not to be wondered at, considering how much was expected of them, and how little of what may be said to be permanently beneficial has resulted from their six years deliberation.

"The case of the medical officers of the army is one that urgently calls for the sympathy and support of their medical brethren generally; and your Council recommend this meeting to memorialise the Government for a redress of the grievances under which they suffer, arising principally from the setting aside, or mutilating the 17th Clause in the Medical Warrant of 1858, which afforded them many advantages, and raised their social position in the service.

"The Financial Statement made up, as usual, to the end of the year 1863, embraces the following particulars:—

| <i>Receipts.</i>  | £   | s.  | d.  |
|---|-----|-----|-----|
| Balance in hand at the end of the year 1862.  | 5   | 3   | 2   |
| Amount of half-crown subscriptions received between January 1st, and December 31st, 1863, inclusive | ... | ... | ... |
|   | £9  | 3   | 2   |

*Disbursements.*

|  | £   | s. | d. |
|--|-----|----|----|
| The Secretary's official expenses, as per account made up to December 31st, 1863 | ... | 4  | 18 |
| 1  |     |    |    |

leaving a balance of £4:5:1, which with ten shillings received since January 1st, 1864, and up to the present time amount to £4:15:1 in the hands of the Treasurer towards defraying the expenses of the current year."

Dr. ROBERTS (St. Asaph) moved, and it was seconded by Mr. EYTON JONES (Wrexham), and carried unanimously—

"That the Report of Council now read be received, adopted, and entered on the minutes of the Branch."

*Vote of Thanks to the Council of the Branch.* It was moved by Dr. J. R. HUGHES (Denbigh), and cordially passed—

"That the best thanks of this meeting be recorded to the Council of this Branch for the past year, for their unremitting attention and valuable services."

*President-Elect for 1865.* It was moved by Dr. TURNOUR (Denbigh), and carried unanimously—

"That John Robert Hughes, M.D., Denbigh, be the President-elect for 1865."

*Place of Annual Meeting for 1865.* Denbigh and Rhyl were put forward as suitable places for holding the annual meeting next year. After some animated discussion, Rhyl, by a majority of one, was selected.

*Council of the Branch for Next Year.* Dr. WILLIAMS (Wrexham), moved, and it was unanimously agreed to—

"That the following members constitute the Council of the Branch for next year, viz:—A. E. Turnour, M.D. (Denbigh); G. T. Jones, Esq. (Denbigh); T. F. Edwards, Esq. (Denbigh); O. Roberts, M.D. (St. Asaph); J. R. Jenkins, M.D. (Ruthin); and F. Theed, Esq. (Rhyl)."

*Representatives in the General Council.* Upon the proposition of Dr. JENKINS, confirmed by the unanimous voice of the meeting, O. Roberts, M.D., St. Asaph, and E. Williams, M.D., Wrexham, were elected representatives of this Branch in the General Council of the Association.

*Election of Secretary and Treasurer.* Dr. WILLIAMS (Wrexham), moved, and it was unanimously carried—

"That D. Kent Jones, Esq., Beaumaris, be the Secretary and Treasurer for the next year."

*Intermediate Meeting.* The kind invitation of Dr. Roberts of St. Asaph, to hold the intermediate meeting in March next at his house, and to dine with him on the occasion, was very cordially received and accepted.

*New Members.* The following gentlemen were duly proposed and seconded, and elected members of the British Medical Association and of this Branch, viz.: Frederick Luxmore Heaton, A.M., M.B., Wrexham; Robert Platt, Esq., Leeswood, Mold; Robert Griffith, Esq., Abergele; William Jones, Esq., Ruabon; and James Richards Walker, Esq., Corwen.

*Papers and Cases.* The following communications were made:—

1. Four Cases, illustrative of the efficacy of the Oil of Male-Fern in Tania. By E. T. Hughes, M.D., Mold.
2. Invagination of the Intestines; with the morbid



preparation, exhibiting the Pleum invaginated into the Caecum. By O. Roberts, M.D., St. Asaph.

3. Paper on Embolism and Apoplexy. By J. R. Hughes, M.D., Denbigh.

4. Remarks on a Case of Embolism. By T. Eyton Jones, Esq., Wrexham.

5. Case of Renal Abscess. By J. C. Davies, M.D., Holywell.

Want of time prevented the reading of an interesting paper on Vaccination by Dr. Hughes of Mold.

*Dinner.* All the members with their guests, namely, Rev. Jenkin Davies, vicar of Mold; Peter Parry, Esq., Coroner for Flintshire; E. B. Vise, Esq., Holbeach; and J. Nash, Esq., dined together at 4 P.M. at the hotel, and before separation, accepted the President's invitation to partake of coffee, etc., at his house. A very pleasant and agreeable evening was spent, and all expressed themselves delighted with their reception and entertainment at Mold.

#### WEST SOMERSET BRANCH: ANNUAL MEETING.

THE annual meeting of the West Somerset Branch was held at Clarke's Hotel, Taunton, on Wednesday, July 6th. The chair was taken at half-past two by the President, J. HAMILTON KINGLAKE, M.D.; the other members present were: Messrs. H. Alford, H. J. Alford, S. Farrant, W. E. Gillett, W. M. Kelly, and W. Liddon (Taunton); J. Cornwall (Ashcott); E. Marchant and H. P. Olivey (North Curry); H. W. Randolph (Milverton); and W. L. Winterbotham (Bridgewater).

THE HONORARY SECRETARY (Dr. Kelly) stated that he had received a number of letters from members who regretted they were unable to attend.

The minutes of the last annual meeting having been read, the following Report of Council was presented.

*Report of Council.* "1. On this anniversary, the West Somerset Branch of the British Medical Association will have accomplished a stage of existence, and arrived at an epoch which is wont to be regarded with more than ordinary interest in the lives of individuals; your Council, therefore, think the fact should not pass unnoticed that the Branch to-day attains its majority, and has arrived at the mature age of twenty-one years. A fine, promising off-shoot at birth, and manifesting, for the most part, much vigour of constitution, its life has nevertheless been sometimes languishing and in danger. The Branch is now in a healthy condition; but it will not bear comparison as to size and extent with many younger Branches which have sprung up and are flourishing in other parts of the country. From its position, it cannot, in the nature of things, be expected to attain to a large growth. Still, your Council would remark, that much may be done by individual exertion; and members are, therefore, urged to keep in mind their responsibilities to the Branch and to the Parent Association; and if each, in his respective capacity and to the best of his ability, would strive to promote medical science, to maintain the honour and interests of the profession, and last, though not least, by attending these periodical meetings, contribute to that sociability and good feeling which should subsist among us, we shall do our best to sustain the body corporate, and to extend its growth in usefulness as well as in size.

"2. Your Council have had no matters brought under their notice during the past year calling for special remark. One new member has been elected, and one will be proposed to-day. The Branch will number thirty-two.

"3. It is with deep sorrow we have to report the death of two members of the Branch: C. P. Collins, Esq., of Dulverton, who died on April 7th, at the age of 70; and R. A. Smith, Esq., of Taunton, who also died at the same advanced age, on June 1st. Our late worthy and much respected President, Mr. Collins, will be specially missed on this day, as he should have opened the proceedings of this meeting. As a perfect specimen of the old school of country practitioner, he could now be rarely matched. Those who had the pleasure of listening to his address last year, will remember the instances he related of the earliest experiences in his pupillage, so strangely contrasting with modern professional usages. He was an attentive and careful observer, cultivating and entertaining sound views in the practice of his profession. He will long live in the memory and hearts of those who knew him. Mr. Smith, who was a member of Council, and always attentive to the duties of his office, was universally respected and esteemed.

"4. The Treasurer's Report shows the finances to be in a satisfactory state, and a balance of £3:19:8 in favour of the Branch.

"5. A letter from Mr. Cornish, suggesting the appointment of a court-medical to decide matters of medical etiquette, will be laid before you.

"6. The treatment which army medical men have suffered at the hands of Government, and which has aroused much indignation in the profession, is a subject which may properly receive consideration at this time; and, should it be deemed advisable, ministers might be memorialised, with a view to remedying the evils complained of.

"7. A *conversazione* meeting was held in January last, at which thirteen members were present. Several interesting communications were read, and a pleasant, instructive evening was passed. Your Council recommends that a similar meeting be held in January next; and members are invited to avail themselves of the opportunity these meetings afford for mutual improvement and social intercourse."

*The late Mr. Collins.* It was proposed by Mr. ALFORD, seconded by Mr. RANDOLPH, and resolved unanimously—

"That this meeting expresses its deep sorrow at the loss it has sustained by the death of its late President, C. P. Collins, Esq.; and that the Secretary be requested to send a copy of this resolution to the widow of the deceased."

*Army Medical Service.* It was proposed by Mr. MARCHANT, seconded by Mr. OLIVEY, and resolved unanimously—

"That a memorial on the subject of Army Medical Service, similar to that presented by the Metropolitan Counties Branch, be drawn up and signed by the President and members of this Branch, and sent to the Secretary of State for War."

*Court-Medical.* A letter from Mr. Cornish was read; but, as he was prevented from being present at the meeting, no resolution was come to on the subject.

*Quarterly Meetings.* It was proposed by Mr. ALFORD, seconded by Mr. LIDDON, and resolved unanimously—

"That quarterly meetings of the Branch (instead of an annual meeting and a *conversazione* meeting only as heretofore) be held during the ensuing year; the days and places of meeting to be fixed by the Council."

*Balance-Sheet.* The Treasurer's Balance-sheet, duly audited and found correct, was produced and approved of.

*New Member.* John Barrett Collins, Esq., of Dulverton, was unanimously elected a member of the Branch.

*Next Annual Meeting and President-Elect.* A letter was read from Mr. Norris, of South Petherton, inviting the Branch to hold its next annual meeting at that place; but as there appeared to be difficulties in the way of acceding to this proposal, and Mr. Norris was not present, it was resolved—

“That the arranging for the next annual meeting, and the appointing of a President-elect, be postponed until the next quarterly meeting of the Branch, to be held about Michaelmas.”

*Council of the Branch.* It was resolved—“That Dr. Gillett, Mr. Liddon, and Mr. Randolph be elected to fill the vacancies; and that the Council for the ensuing year do consist of: H. J. Alford, Esq.; G. Kidgell, Esq.; W. Reynolds, Esq.; W. E. Gillett, Esq.; W. Liddon, Esq.; H. W. Randolph, Esq.”

*Secretary and Treasurer.* It was resolved unanimously—“That Dr. Kelly be re-elected as Honorary Secretary and Treasurer.”

*Votes of Thanks to the Council for their services during the past year, and to the Secretary and Treasurer, were unanimously passed.*

*President's Address.* A learned and eloquent address was then read by the President, which was much applauded; and it was unanimously resolved—

“That the best thanks of the meeting be given to the President for his address; and that he be requested to allow the same to be published in the JOURNAL.”

*The Dinner.* The members of the Branch then dined together; the enjoyment of the good fare provided by the hostess, Mrs. Clarke, being much enhanced by a liberal present of champagne given by the President. The party afterwards adjourned to Wilton House, the hospitable mansion of the President, where ample provision was made for their amusement and entertainment during the remainder of the evening.

#### METROPOLITAN COUNTIES BRANCH: ANNUAL MEETING.

The twelfth annual meeting of the Metropolitan Counties Branch was held at the Crystal Palace, Sydenham, on Tuesday, July 12th, at half-past 3 p.m. There were present: F. Sibson, M.D., F.R.S., and afterward C. F. J. Lord, Esq., in the Chair; Drs. T. Ballard, A. Billing, F.R.S., G. C. Dale, A. Douglas, S. Gibbon, R. Greenhalgh, G. K. Hardie (Aldershot), A. Henry, Graily Hewitt, W. Lewis, W. O. Markham, P. Oates, J. H. Paul (Camberwell), W. F. Ramsay, C. H. F. Routh, J. Seaton (Sunbury), E. H. Sieveking, A. P. Stewart, E. H. Vinen, and G. Webster (Dulwich); and Messrs. S. S. Alford, G. Bottomley (Croydon), J. C. Burrows (Brighton), C. H. Rogers-Harrison, C. Holthouse, W. Martin (Hammersmith), J. Millar, and J. Probert.

*New Members.* James R. Traer, Esq., of Hans Place, Chelsea, was elected a member of the Association and of the Branch; and the following gentlemen, already members of the Association, were elected members of the Branch: A. Billing, M.D., F.R.S.; G. K. Hardie, M.D., 73rd Regiment; C. Holding, Esq.; and J. W. Ogle, M.D.

*Report of Council.* Dr. HENRY, one of the Honorary Secretaries, read the following report.

“The Council of the Metropolitan Counties Branch, in presenting their report to the twelfth annual meeting, have much pleasure in congratulating the Branch on the continued steady increase of its members. At the last annual meeting, the number of members on the list was 175. Since that time, two members—Mr. Ansell (one of the best members of

the Branch, and a valued and active supporter of it in its earlier years) and Dr. Abram Cox—have died; seven have resigned or gone away; and thirty-four new members have joined; making the total number at present 200.\*

“During the past year, your Council has summoned two general meetings of the Branch, for the discussion of subjects of high professional interest.

“At the first of these meetings, held on February 16th, a Committee, consisting of your Council, with power to add to their number, was formed for the purpose of watching such Bills introduced into Parliament as might in any way affect the interests of the medical profession. This Committee has met on several occasions, and a special report from it will be presented. Thanks are due to those members of the Branch who readily consented to cooperate with your Council as members of the Committee; and also to Dr. Gibbon, who has kindly undertaken the duty of acting as Secretary to the Committee. Your Council recommend that the Committee be reappointed, and requested to continue their labours.

“Your Council, having judged it fitting that the Branch should take cognisance of the present serious position of the Army Medical Service, summoned a general meeting to take the subject into consideration. This meeting was held on June 13th, when the resolutions, which have just now been read in the minutes, were passed with unanimity. The Council, in pursuance of the directions given to them, have embodied these resolutions in memorials, which have been presented by deputations of your Council and other members of the Branch to the Right Hon. the Earl De Grey and Ripon, the Secretary of State for War, to H.R.H. the Commander-in-Chief, and to the Director-General of the Army Medical Department. An account of the deputation to the Secretary for War appeared in the JOURNAL of last Saturday. It is, therefore, unnecessary to recapitulate the proceedings; but your Council would suggest that thanks are especially due to J. Abel Smith, Esq., M.P., who introduced the deputation, and to Dr. Burrows, President of the Medical Council, and F. C. Skey, Esq., President of the Royal College of Surgeons, who, in their official capacities, spoke earnestly in support of the memorial. Dr. Watson, the President of the Royal College of Physicians, also notified to Dr. Stewart by letter his hearty concurrence in the memorials, although he was unavoidably prevented from joining the deputations. The memorials to the Commander-in-Chief and to the Director-General of the Army Medical Department were similar to that presented to Earl De Grey and Ripon, but with certain necessary modifications of expression. The memorial to the Commander-in-Chief was presented to His Royal Highness on Saturday last, the deputation being introduced by Mr. Skey; and that to the Director-General was presented yesterday. On each occasion, your President, Dr. Sibson, your Secretary, Dr. Stewart, and other members, discussed and explained to the authorities—by whom the deputations were courteously received—the objects of the memorials and the grounds on which they were founded. On the two occasions last referred to, your Council found that the great argument used against granting to army medical officers the precedence which was urged in the memorials, was, that such a step would interfere with military discipline. The deputations, however, saw no reason for withdrawing their request, and endeavoured to urge on the authorities with whom they had inter-

\* Since the meeting was held, information has been received of the death of Dr. James Ford; and an application for admission has been received from Thomas Hewlett, Esq., of Harrow.



views that, while they would not desire for the army medical officers the right of presiding at courts-martial, or in any way interfering with purely military matters, there were boards—such as those on sanitary matters—at which medical men were not only qualified to be members, but, if senior in rank to other officers present, to preside. Your Council regret that they can hold out but very little hope of an immediate improvement in the state of the Army Medical Service; but they would recommend their successors and the members of the Branch not to allow the subject to drop, but to continue, with other bodies and members of the profession, to endeavour to obtain for the army medical officer, in permanency, that honourable position which is due to himself and to the profession to which he belongs.

"In accordance with a resolution of your Branch, the Secretaries have requested the cooperation of the other Branches of the Association in the endeavour to obtain an improvement in the Army Medical Service. Several of the Branches have, at their annual meetings recently held, complied with this request; and the thanks of this Branch are due to them for the valuable moral aid which they have thereby afforded.

"In conclusion, your Council have pleasure in calling attention to the healthy state of the finances of the Branch, as will be shewn in the report of income and expenditure about to be presented."

Dr. ROUTH proposed, Mr. CORDY BURROWS seconded, and it was resolved—

"That the Report now read be received, adopted, and entered on the minutes."

*Report of Committee on Parliamentary Bills.* Dr. GIBBON read the following report.

"The following Bills, affecting the interests of the profession, have been introduced into Parliament during the present session.

"1. The Insane Prisoners Act Amendment Bill, by Sir George Grey, to make further provision for the confinement and maintenance of insane prisoners.

"2. A Bill by Mr. Bruce, for the Prevention of Infectious Diseases amongst Cattle.

"3. A Bill by the same gentleman, to Amend the Law relating to the Importation of Diseased Cattle and Unwholesome Meat.

"4. A Bill by the Chancellor of the Exchequer, to grant Additional Facilities for the Purchase of Small Government Annuities, and for assuring Payments of Money on Death.

"5. A Bill by Mr. Peel, to enable Her Majesty to grant a Lease for Nine Hundred and Ninety-nine Years of the Building known as the College of Physicians, in Pall Mall East.

"6. A Bill by Lord Clarence Paget, for the Prevention of Contagious (Venereal) Diseases at certain Naval and Military Stations.

"7. The County Courts Acts Amendment Bill, by the Lord Chancellor, for the Limitation of Actions and Process for Small Debts, and to amend the Acts relating to the County Courts, and to confer on such Courts a limited Jurisdiction in Equity.

"To all these measures the attention of your Committee has been directed.

"In the Insane Prisoners Act Amendment Bill, the Committee has endeavoured to get the words 'any two legally qualified medical practitioners' substituted for the words 'any two physicians or surgeons, or one physician and one surgeon,' in order that gentlemen holding the diploma of the Apothecaries' Society might not be disqualified for certifying under the provisions of the Act. As, on inquiry, your Committee learned that it was not usual to give the medical officers of prisons any extra and special remuneration for this arduous and responsible work,

they resolved to attempt to get the following clause added to the Bill.

"The Treasurer of the county is, or the Commissioners of Her Majesty's Treasury are, hereby authorised to pay to duly qualified medical practitioners, for their assistance under this Act, such fee as to the visiting justices, or to the Secretary of State for the Home Department, shall seem proper."

"In the Cattle Diseases Bill, and the Cattle Importation Bill, it was thought by the Committee that the officers termed 'cattle inspectors' in the former, and 'examiner of unwholesome meat' in the latter, ought to be either duly qualified medical practitioners or veterinary surgeons holding the diploma of some recognised veterinary institution; and steps were taken before the Committee on Cattle Diseases, but without success, to induce them to limit the appointment of cattle-inspector to men thus qualified. The Committee on the Cattle Importation has not at present reported.

"The Government Annuities Bill, like the Post Office Saving Banks Act, by rendering provident habits more practicable and of easier adoption amongst the poorer classes, is calculated indirectly to benefit medical practitioners. At first, your Committee were under the apprehension that the arduous work of examining the proposers of these small assurances would be devolved upon the ill-paid and overworked Poor-law medical officers, without any extra remuneration. They resolved, therefore, to endeavour to get either a uniform fee of 5s. allowed for each such examination, or one varying from 2s. 6d. to 10s. 6d., according to the sum assured; but, on further inquiry, it appeared that all the working details of the measure, when it becomes law, will be entrusted to an eminent member of the profession; and that a fair rate of remuneration will be given for such medical examinations.

"The Contagious (or Venereal) Diseases Bill proposes to make the entrance of all prostitutes suspected or known to be diseased into civil hospitals, to be chartered for the purpose by the Government, compulsory under severe penalties. Although provision is made in the Bill for paying the hospitals for the maintenance and treatment of these 'unfortunates' out of the public money, nothing is said as to remunerating the profession for this important public service. Your Committee, fearing lest this should be used as a precedent for imposing other public gratuitous labour on the profession, have resolved to urge upon the promoters of the Bill the expediency as well as the justice of paying medical practitioners at a definite rate for attending such cases.

"The County Courts Acts Amendment Bill, inasmuch as it proposed to limit the recovery of debts under £20 to within twelve months from the time the last item was incurred, would have seriously affected the interests of the great bulk of the profession. The Committee took active steps, therefore, to oppose it, and congratulate the Branch that it has been withdrawn.

"A Bill for the Regulation of Pharmacy, prepared by the Pharmaceutical Society, although not at present introduced into Parliament, has received the attention of your Committee. Although there is a saving clause, which expressly secures to medical practitioners their rights and privileges, the Bill, if it become law, must have considerable influence on the profession. Your Committee, therefore, commend it to the careful consideration of the profession, and themselves propose to watch it closely in its passage through Parliament.

"SEPTIMUS GIBBON, *Hon. Sec. to the Committee.*"

Dr. WALLER LEWIS proposed—

"That the Report of the Committee on Parlia-

mentary Bills be received, adopted, and entered on the minutes.

"That the cordial thanks of the meeting be given to the Committee; that they be reappointed, and requested to continue their services; and that the special thanks of the meeting be given to Dr. Gibbon, the Honorary Secretary of the Committee."

Dr. LEWIS said the report showed that the Committee had not been idle since their appointment, but had even taken into consideration bills with which, at first sight, the medical profession would seem to have but little direct concern.

Dr. OATES seconded the motion.

The PRESIDENT referred to the valuable assistance which the Committee had received from Dr. Gibbon.

Mr. CORDY BURROWS said that, as regarded work done, the report of the Committee was such that a better one could not be presented. The Metropolitan Counties Branch was peculiarly calculated, by its locality, for carrying on proceedings of the kind referred to in the report.

After a short discussion, the motion was unanimously carried.

*Financial Statement.* Dr. HENRY presented the financial statement of the Branch for the past year, from which it appeared that the receipts (including a balance of £4:18:0 from last year) amounted to £30:10:6; and the expenditure to £14:2:6; leaving a balance in hand of £16:8:0.

Mr. CORDY BURROWS proposed, Dr. VINEN seconded, and it was resolved—

"That the financial statement now read be received, adopted, and entered on the minutes."

*Election of Officers and Council.* The balloting lists having been examined, the following officers and Council were found to be unanimously elected for 1864-65: *President*, Chas. F. J. Lord, Esq. (Hampstead); *President-elect*, Ed. H. Sieveking, M.D.; *Vice-Presidents*, R. Dunn, Esq.; F. Sibson, M.D., F.R.S.; *Treasurer*, E. Lankester, M.D., F.R.S.; *Secretaries*, A. P. Stewart, M.D., and A. Henry, M.D. *Other Members of Council—for the Metropolitan District*, W. Camps, M.D.; J. Rose Cornack, M.D.; S. Gibbon, M.B.; C. H. Rogers-Harrison, Esq.; W. O. Markham, M.D.; J. Millar, Esq.; B. W. Richardson, M.D.; C. H. F. Routh, M.D.; *For the Extra-Metropolitan District*, W. Martin, Esq. (Hammersmith); J. H. Paul, M.D. (Camberwell); H. Cooper Rose, M.D. (Hampstead); and G. Webster, M.D. (Dulwich).

*The President's Valedictory Address.* Dr. SIBSON said that he now had the painful pleasure of resigning his office of president. When he was elected last year, he had some doubt of being able to perform his duties; but he hoped that he had done them tolerably well. The Branch had done a little work during the year. A Committee on bills in Parliament affecting the medical profession had been formed, and had presented a report; and he believed the continuance of that Committee likely to be of very great service. The last great movement which the Branch had undertaken, that of endeavouring to obtain an improvement of the position of the army medical officers, was initiated by Dr. Stewart at a meeting of the Branch held in Soho Square. At that meeting, resolutions were passed, in consequence of which deputations waited on the Right Honourable the Secretary for War, H. R. H. the Commander-in-Chief, and the Director-General of the Army Medical Department. Lord De Grey and Ripon received the deputation, which was presented by Mr. Abel Smith, M.P., most readily and courteously. Dr. Burrows, the worthy President of the Medical Council, and Mr. Skey, the President of the Royal College of Surgeons, attended the deputation, and expressed their

opinions with much force, thereby rendering most valuable aid. Lord De Grey and Ripon entered at once into the objects of the memorial, and displayed a knowledge of the subject for which the deputation was certainly not quite prepared. After a few remarks had been made by himself (Dr. Sibson), Dr. Stewart, Dr. Burrows, and Mr. Skey, his lordship immediately began in a most business-like way to discuss the memorial piece by piece. He listened attentively to all the deputation had to say, and appeared to give a partial assent to the idea that on certain boards the medical officer should occupy his right place. Dr. Sibson, in reference to this point, reminded his lordship of the excellent working of the mixed boards instituted by Napoleon at the suggestion of Larrey. There was one objection made by his lordship, that was not thoroughly met at the time—the recent decrease in the numbers of the medical profession. In reply to this, however, it must be remembered that the medical service of the navy, although less popular than that of the army, was filled up. And not only was this the case, but the medical appointments in Green's ships, in the Peninsular and Oriental Company's service, etc., were all eagerly sought for, in spite of the diminished numbers of medical men—which diminution he (Dr. Sibson) looked on as a healthy position of the profession. Even poor-law appointments were all filled; and, if these were compared with the medical commissions in cavalry regiments, which at first would seem far preferable, it was surprising that there should be such a vacuum in the latter. Altogether, he thought the deputation had reason to be satisfied with their interview with Earl De Grey and Ripon. He wished he could say that the deputation to H.R.H. the Commander-in-Chief had been equally successful. His Royal Highness received them in a manner which left nothing to be desired as to the reception itself; but he seemed to be thoroughly imbued with the idea of discipline. He endeavoured to make the deputation understand that the medical officer was deprived of his position at boards, etc., for the sake of discipline; while other matters were regarded by him as questions of finance. In the memorial to the Director-General, all expressions of blame against him had been excluded; for the question was one affecting the military executive. The Director-General, however, spent an hour in proving that the loss of precedence by the army medical officers was not due to him; because, in less than three months after it was issued, the precedence clause of the Warrant of 1858 was silently repealed by a minute from the executive. The Director-General was clearly acquitted of any concern in this; but he (Dr. Sibson) wished that there was any shadow of hope that he would aid in improving the position of the army surgeons. The Director-General, however, was not to be blamed. He was placed in his position by discipline; and he had no idea of doing any thing beyond his place, as strictly defined by discipline. That was his nature; and he ought not to be blamed unless he acted untruthfully. The Director-General intimated to the deputation that he had no desire to secure first-class men for the army medical service; that third-class men would do equally well. He informed the deputation that he had three hundred candidates for the office of acting-assistant surgeon, who possessed certificates of the most laudatory kind; and that members of parliament had actually applied to him on behalf of some of these candidates. In reply to a question put by Dr. Richardson, he said that he was prepared to continue to use these men for the public service. With regard to confidential reports he (Dr. Sibson) thought there would be no objection if the assistant-surgeon signed them, to



show that he had seen them: and, with regard to marking deserters, the Director-General seemed inclined to concede that the orderly officer of the day should also be present. He (Dr. Sibson) could not conclude his remarks without referring to the fact that the subject of the army surgeons had been originally brought forward by Dr. Stewart, who had shewn a deep interest in the matter.

Before concluding, Dr. Sibson wished to make a few remarks on the manner in which lecturers in the medical schools had been spoken of in the *JOURNAL*. He would pay every tribute to the spirit which animated the editor; and, in the very articles to portions of which he objected, there was a whole field of great suggestions, worthy of being carefully considered and reduced to practice. But he objected strongly to the statement that, with two or three exceptions, the primary object of the lecturers was to gain private practice. He had himself for many years lectured on medicine; and could say, that gentlemen in preparing their lectures considered only how they might instruct students, whereas, if practice were their object, there were other ways in which their time could be much more profitably spent. He concluded by introducing his successor, Mr. Lord.

*President's Address.* Mr. LORD then took the chair, and delivered an address.

Dr. MARKHAM moved—

"That the cordial thanks of the Branch be given to the President for his excellent address; and that he be requested to publish it in the *JOURNAL*."

Dr. SIBSON seconded the motion, which was carried unanimously.

*The Late Mr. Peter Martin.* Dr. SIBSON proposed, Dr. STEWART seconded, and it was unanimously resolved—

"That this Branch desires to express its sincere sympathy with the members of the South-Eastern Branch upon the loss which they have sustained in the death of their highly respected and valuable Secretary, Mr. Peter Martin.

"That, as a tribute of respect for the memory of Mr. Martin, a donation of five pounds be contributed from the funds of this Branch, towards the memorial instituted in remembrance of him by the South-Eastern Branch."

*Representatives in the General Council.* The following members were chosen to represent the Branch in the General Council of the Association:—G. Burrows, M.D., F.R.S.; S. Gibbon, M.B.; A. Henry, M.D.; C. F. J. Lord, Esq.; W. O. Markham, M.D.; B. W. Richardson, M.D.; C. H. F. Routh, M.D.; F. Sibson, M.D., F.R.S.; E. H. Sieveking, M.D.; G. Webster, M.D.; with A. P. Stewart, M.D., *Secretary*.

*Vote of Thanks to the Retiring President.* Mr. W. MARTIN proposed, and Dr. WEBSTER seconded—

"That the cordial thanks of the Branch be given to the retiring President, Dr. Sibson, for his able and courteous conduct in the chair on all occasions, and for the active interest he has taken in the welfare of the Branch and in all subjects brought under its notice."

The motion was carried by acclamation.

*Dinner.* The members, to the number of twenty-three, afterwards dined together; C. F. J. Lord, Esq., in the chair.

**DEATH OF MEISSNER.** On July 9th, died Paul Trangott Meissner, Professor of Chemistry in the Polytechnic School of Vienna, in his 87th year. "Meissner was one of the most learned naturalists of Austria; he has left a European name, an honour to science and his fatherland."

## Correspondence.

### THE COLLEGE OF SURGEONS AND REFORMERS.

SIR,—After reading the letter of Mr. Paget of Leicester in your last number, and the speech of Mr. Turner of Manchester at the Fellows' dinner, I am led to give up all hopes of either of those gentlemen as reformers. I feel satisfied that there are many more *thorough* reformers in the Council already. As to election of country Fellows into the Council, I think we may as well give that *idea* up, considering that, out of six or seven hundred country Fellows, only sixty-eight could be induced to attend the election. The notion of country Fellows voting by proxy is attended by difficulties. The analogy supposed to exist between the Universities of Oxford and Cambridge is fallacious. There the voting is open, and there is no difficulty in attesting the proxy; but at the College it is secret, by ballot. But, in fact, the Fellows have in their own hands the power of carrying out the reforms you have so well advocated; viz., when an Examiner offers himself for re-election into the Council, on no account to re-elect him. Very shortly, by this means, all the Examiners will be out of the Council. I am, etc., A REAL REFORMER.

[Our esteemed correspondent is, it seems to us, too hasty and too severe on Mr. Paget and Mr. Turner. Mr. Paget is, we think, wrong in waiting for pressure from behind. Great reformers are not driven on by the multitude; they lead, and drag the multitude with them. They stand on truth and reason: so might Mr. Paget. With such a cause as he has to fight for, and with the whole press to back him, victory and its rewards are certain to the man of courage and resolve. The difficulty raised by our correspondent about the voting by proxy of country Fellows is purely imaginary. There are half a dozen ways in which it might be most simply managed. To show how facile it is, we might mention a fact which is, we believe, not generally known even to the members of Council; viz., that, at the time when the Charter of 1852 was obtained, Mr. Green strained every nerve to get a clause inserted in it to give country Fellows the power of voting by proxy. We recommend this fact to the consideration of those gentlemen who at this present time support voting by proxy. If the Council, let it be remembered, had not opposed Mr. Green on that occasion, the country Fellows would at this present time be possessed of the power of voting by proxy. The Council, therefore, are responsible to the Fellows, and bound in honour to procure a new Charter. EDITOR.]

### GRIFFIN TESTIMONIAL FUND.

#### LETTER FROM J. MOORHEAD, M.D.

SIR,—Acting on behalf of the gentlemen whose names are subjoined, I have had much pleasure in forwarding Dr. Fowler a cheque for £13:13, as a contribution to the above fund.

Resident, as we are, in Weymouth and its vicinity, and, therefore, the better able to appreciate, not only the incalculable amount of labour entailed upon our *confrère* Mr. Griffin by the collecting of facts and working of figures in support of the cause of Poor-law medical reform, but also the pure unselfish motives which have inspired him throughout the arduous struggle in which he has so long been engaged, we

gladly avail ourselves of this opportunity to unite with the profession in paying him a well merited tribute of respect for the ability, energy, and zeal, with which he has invariably advocated this important question. And, though it is to be regretted his efforts have not, as yet, met with that success they so eminently deserved, still it must be admitted that the concessions recommended in the Report of the Select Committee are mainly due to the persevering advocacy of our indefatigable townsman.

Impressed by these feelings, and convinced that Mr. Griffin, by his disinterested, self-sacrificing labours, extended over a period of nearly ten years, has done honour to our calling, we trust that, not only the Poor-law medical officers, but our brethren generally, will display such *esprit de corps* on this occasion as to demonstrate that, as a profession, we are capable of appreciating such noble Herculean efforts made on behalf of suffering humanity.

In the name of the following contributors to the fund,

I am, etc.,

J. MOORHEAD, M.D.

Weymouth, July 1<sup>st</sup>, 1864.

A. Brown, M.D. (Weymouth), £1:1; M. Couchet, M.D. (Weymouth), £1:1; W. Fowler, Esq. (Weymouth), £1:1; Messrs. Fox and Rhodes (Weymouth), £1:1; J. Lithgow, M.D. (Weymouth), £1:1; J. Moorhead, M.D. (Weymouth), £1:1; H. Nathan, Esq. (Weymouth), £1:1; W. Smith, M.D. (Weymouth), £1:1; H. Tizard, M.D. (Weymouth), £1:1; T. Parker, M.D. (Abbotsbury), £1:1; J. W. Pridham, Esq. (Broadway), £1:1; H. P. Brodribb, M.D. (Portland), £1:1; T. N. Nicolas, M.D. (Portland), £1:1.

#### TARTARISED ANTIMONY IN STRUMOUS OPTHALMIA.

LETTER FROM ROBERT B. CARTER, ESQ.

SIR,—Your correspondents, Mr. Chesshire, Dr. Price, and Mr. Garnham, who have lately written upon the use of tartarised antimony in strumous ophthalmia, would confer a benefit upon the public if they would describe with precision the meaning they attach to the words.

Prior to the recent researches of Mr. Hutchinson, nearly the whole of the ocular disease arising from inherited syphilis was described as "strumous ophthalmia."

Putting inherited syphilis on one side, there are at least three distinct forms of pustular conjunctivitis, and at least two forms of corneal disease, requiring differences in treatment, and all frequently called "strumous ophthalmia."

Moreover, these several affections are of common occurrence in patients who are frequently free from struma, as well as in those who are the subjects of that diathesis; and extended observation casts much doubt upon the propriety of retaining the word "strumous" to describe any form of ophthalmia whatever. "Une statistique bien faite" (writes Professor Wecker) "ne ferait certes pas ressortir cette prépondérance des enfants scrofuleux parmi le nombre des personnes atteintes de conjunctivite pustuleuse." The symptom of intolerance of light, upon which stress is laid by many writers, is extremely uncertain in its appearance, and is of little value as an aid to diagnosis.

It would, therefore, be highly interesting to know whether your correspondents mean, by "strumous ophthalmia", some definite pathological condition, in whatever person it may occur, or any form of ophthalmia, occurring in a strumous patient. Dr. Price says that the treatment was beneficial "save in a few instances." What were those instances?

If your correspondents will favour us with more explicit information, I think we shall probably find that the antimony exerts, in the ophthalmia generally its well known sedative action; that it thus diminishes nervous irritability, pain, and photophobia, and places the eye in a condition favourable to repair. If this be so, the antimony will be indicated, not because the case is "strumous", but in proportion to the degree of nervous irritation.

In the great majority of the cases commonly called "strumous ophthalmia", the struma requires constitutional, and the ophthalmia requires local, treatment. In pustular cases, the insufflation of dry calomel, or, where this produces irritation, the use of atropine and a compressive bandage, will usually cure the ophthalmia in a few days; and the use of the setons in the temples, so much employed by Mr. Critchett, will usually prevent a recurrence of the local mischief. Still, there are some very rare cases of great obstinacy, which resist for months, or even years, all the resources of our art; and, for these, we might be encouraged to administer antimony, if we knew a little more about the character of its action, and about the conditions in which it has been found to be useful.

I cannot lay my hand upon Mr. Chesshire's paper; but Dr. Price and Mr. Garnham convey to me the impression that they exaggerate the ordinary difficulty of relieving "strumous ophthalmia"; and that this exaggeration arises from want of attention to local treatment. As far as the ophthalmia alone is concerned, proper local treatment is the great secret of success.

I am, etc.,

ROBERT B. CARTER, F.R.C.S.(Exam.)

Stroud, Gloucestershire, June 25<sup>th</sup>, 1864.

A MEDICAL CORONER IN BOMBAY. The *Bombay Times* informs us that Dr. Diver has been appointed coroner for Bombay, and succeeds a man of law in the office. "The post is rightly filled by a gentleman of the medical profession."

MIDDLESEX LUNATIC ASYLUM, COLEEN HATFIELD. A summer entertainment was given to the patients on the 15<sup>th</sup> inst. A very efficient band attended, and tents were provided for supplying refreshment to the patients, and a confectioner supplied the requirements of the visitors and general public. The patients, who were considered by the medical superintendent of the department fit to take part in the entertainment, were assembled at four o'clock in the front corridors of the respective departments. At a quarter past four the female patients (numbering about 400), headed by the band, left the asylum by the principal entrance, followed by the male patients about 300; and walked in regular procession to the fields in which the entertainment was to take place. The chief attraction to the vast majority was dancing. The amusements were under the superintendence of certain of the attendants and nurses, who rigidly followed out the special instructions which they had received—exercising great temper and preserving the strictest order and decorum. Cake and lemonade were distributed in the wards to such of the patients as could not join in the out-door amusements. At half-past seven o'clock the patients left the field, preceded by the band, in the same order in which they arrived, and were conducted to their respective departments by the same route by which they had left the asylum. The weather was singularly fine, and the joyous manner of the larger portion of the unfortunate lunatics indicated that the event had really occupied their imagination for some days previously.



## Medical News.

**APOTHECARIES' HALL.** On July 14th, the following Licentiates were admitted:—

Foster, John Frederick, Old Court, Guernsey  
Freeman, Henry William, Bideford, Devon  
Hope, Henry, St. Bartholomew's Hospital  
Reade, Albert Comberbach, St. Bartholomew's Hospital  
Sinclair, Duncan Francis, Hailstead, Essex

At the same Court, the following passed the first examination:—

Eaton, John Chamberlin, St. Bartholomew's Hospital  
Hickman, Richard Murhall, King's College Hospital  
Major, Napoleon Bisdee, St. Mary's Hospital  
Müller, August, St. Mary's Hospital  
Sims, Francis Manley Bolders, St. George's Hospital  
Swindale, John, Middlesex Hospital

As an Assistant:—

Marsh, Walter Alfred, 23, New Kent Road

### APPOINTMENTS.

#### ARMY.

CATTELL, Assistant-Surgeon W., 5th Dragoon Guards, to be Staff-Assistant-Surgeon, *vice* J. H. Bews.  
M'SHEEHY, Staff-Assistant-Surgeon E. L., M.D., to be Assistant-Surgeon 5th Dragoon Guards, *vice* W. Cattell.  
O'CONNOR, P., Esq., to be Staff-Assistant-Surgeon.

#### ROYAL NAVY.

ANDREWS, John, M.D., Surgeon, to the *Frederick William*.  
FORBES, Charles, M.D., Surgeon, to the *Cambridge*.  
HENRY, James, Esq., Surgeon, to the *Aboukir*.  
HILL, William, Esq., Surgeon, to the *Clio*.  
O'BRIEN, William E., Esq., Surgeon, to the *Wasp*.  
PIERCEY, Frederick, Esq., Assistant-Surg., to the *Royal Sovereign*.

**VOLUNTEERS, (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—**

BENNETT, H., Esq., to be Surgeon 1st Administrative Battalion Dorsetshire R.V.  
DICKINSON, T., Esq., to be Assistant-Surgeon 1st Middlesex Engineer Volunteers.  
FARQUHARSON, J., Esq., to be Surgeon 4th Durham R.V.  
FOTHERGILL, J. R., Esq., to be Assistant-Surgeon 4th Durham R.V.  
JONES, R. E., Esq., to be Hon. Assistant-Surgeon 11th Suffolk R.V.  
ROWE, C. R., Esq., to be Assistant-Surgeon 1st Administrative Battalion Dorsetshire R.V.  
THOMSON, G. W., Esq., to be Assist.-Surg. 4th Roxburghshire R.V.  
TIZARD, H., M.D., to be Assistant-Surgeon 1st Administrative Battalion Dorsetshire R.V.

### DEATHS.

ABRAHAM, Thomas, M.D., at Marsden Villa, Haverstock Hill, aged 56, on July 16.  
BARNES, John, M.D., at 3, Rupert Road, Upper Holloway, aged 63, on July 1.  
FELL, William, Esq., Surgeon, at Ambleside, aged 72, on July 1.  
FORRESTER, William, Esq., Surgeon H.M. Madras Army, on board the *Nubia*, in the Red Sea, aged 35, on June 30.  
HARRISON, Arthur A., M.B., on board the *Macgregor Laird*, off Accra, aged 33, on June 12.  
REE, On July 18, at Fulham, aged 7, Arthur, youngest child of H. P. Ree, M.D.

**CATTLE DISEASES PREVENTION BILL.** This Bill has been withdrawn for the present session.

**COLLEGE OF PHYSICIANS BILL.** This bill was read a second time in the House of Lords on July 15th.

**SIR R. WILDE.** The honorary degree of Doctor in Medicine has been bestowed on Sir William Wilde by the University of Dublin.

**UNIVERSITY OF VIENNA.** Herr Hofrath, Professor Hyrtl, has been appointed *Rector Magnificus* of the University of Vienna for the session of 1864-5.

**ROYAL COLLEGE OF PHYSICIANS.** Dr. Pollock, Dr. Wood, Dr. Priestly, and Dr. Harley, were on the 20th inst., admitted Fellows of the College of Physicians.

**BEQUEST.** By will, Colonel Astell leaves to the Middlesex and Westminster Hospitals, the Bedford Infirmary, and the Royal Free Hospital, Gray's Inn Road, each £100.

**UNION MEDICAL OFFICERS IN IRELAND.** Mr. McEvoy has given notice that he will, early next session, call the attention of the House of Commons to the claims of medical officers of unions in Ireland.

**WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.** The annual meeting was held on Friday, June 3rd, the president, Dr. Barclay, in the chair. The following members were elected as officers for the session of 1864-65. *President*, G. D. Pollock, Esq.; *Vice-Presidents*, M. Baines, M.D.; P. Hewett, Esq.; J. Lane, Esq.; W. Marcett, M.D. *Council*, B. E. Brodhurst, Esq.; D. Davies, M.D.; H. W. Fuller, M.D.; A. Godwin, M.D.; T. Keen, Esq.; — Knight, Esq.; W. Martyn, M.D.; — Richardson, Esq.; J. Rouse, Esq.; J. R. Traer, Esq.; C. Vasey, Esq.; and J. Way, M.D. *Treasurer*, M. Baines, M.D. *Honorary Librarian*, T. Dickinson, Esq. *Honorary Secretaries*, W. Milner, Esq.; C. Hunter, Esq. *Auditors*, H. P. Bannister, Esq.; J. Way, M.D.

**SALARY OF THE REGISTRAR OF THE UNIVERSITY OF LONDON.** In the House of Commons, on Monday week, Sir H. Willoughby asked why the salary of the Registrar had been increased from £800 to £1,000 a year. Mr. F. Peel said that, when the University was first founded, it was proposed that the salary of the Registrar should be £1,000 a year; but it was thought better in the first instance that a smaller salary should be given. The salary was accordingly fixed at £500, and was raised from time to time till it reached £800 last year. It had now been raised to the *maximum* £1,000. Dr. Carpenter had held the office for a considerable time; and, its duties having very greatly increased, it was thought he had a fair claim to the full salary originally intended to be given.

**INDIAN MEDICAL SERVICE BILL.** On Tuesday, the House of Commons went into committee on this Bill, when a discussion arose on the subject of competitive examination for the medical service, from which it appeared that it was proposed to abolish that system with regard to the Indian medical service, according to the discretion of the Secretary of State for India. Mr. Hennessy contended that further time for consideration should be given. Sir C. Wood said he was willing to insert a provision that the regulations under the bill should be laid before parliament within fourteen days of their being made, if parliament be sitting, or within fourteen days after the assembling of parliament, and he moved the insertion of words to that effect. This proposition was carried.

**CONTAGIOUS DISEASES BILL.** On Tuesday, on the motion for going into committee on this Bill, Mr. Ayrton contended at very considerable length that the proceedings that were to be taken against the females to whom the bill was intended to apply were of an anomalous character, and contrary to the rules of legislation which ordinarily guided the house. Certain powers of a very stringent character were proposed to be given to certain police authorities and others, in the places to which the bill applied, for taking proceedings against females and having them committed to an hospital, and there kept until they were free from disease. He thought the house ought not to pass such an exceptional bill at this period of the session, when there was not sufficient time for its proper consideration. Such a bill as this was a bill for the promotion of immorality and vice, as it was to enable soldiers and sailors to minister to their passions and vices with impunity. Sir M. Peto considered that the government were deserving of great credit for having introduced this bill. He believed that the working of the measure would be most salutary and beneficial. The house then went into committee on the bill.

Lord C. Paget said it was the intention of the government to institute an inquiry into the general subject of the particular disease to which this bill referred. Colonel North said this was a matter that did not apply to the army and navy exclusively. There could be no doubt that it would be most advisable to introduce some such general system as that which existed on the Continent.

**MEDICAL JOURNALISM IN AMERICA.** The war of the rebellion has well-nigh obliterated medical journalism in this country. Where we once counted our exchanges by scores, we can now count them on our fingers' ends. In the Southern States, once so prolific in medical periodicals that each considerable town had one or more representatives, the whole serial medical literature has long since disappeared. A nondescript journal, entitled the *Confederate Medical and Surgical Journal*, has lately appeared; but, as it has not favoured us with an exchange, we have only heard of its existence through a sympathising foreign journal. At the North, the effect of the war has not been less disastrous. The list of periodicals has undergone thorough revision, the names of many having been permanently erased, and the size and appearance of others materially changed. (*American Medical Times*.)

**THE ARMY MEDICAL SERVICE.** The following petition has been presented to the House of Commons by the Faculty of Physicians and Surgeons of Glasgow. "To the honourable the Commons, etc. The petition of the President and Fellows of the Faculty of Physicians and Surgeons of Glasgow,—humbly sheweth, that your petitioners have exercised the functions of a chartered College of Physicians and Surgeons since 1599; and, besides examining and licensing medical practitioners, have always taken an interest in whatever has affected the profession of medicine. That the inadequate remuneration of the medical officers of Her Majesty's army, and their deficient authority in purely medical questions, involving as this latter has done, alike the safety, in a sanitary point of view, of the troops, and the well-being and comfort of the soldier, were long matters of regret to your petitioners. That in 1857 your petitioners had great satisfaction in finding the pay of army assistant-surgeons somewhat raised at the recommendation of a Committee of your Honourable House, and that in the following year the relative status of medical, as compared with military officers, was placed by a Royal Warrant on an honourable and satisfactory footing. That your petitioners regret to learn, however, that the advantages of the said Warrant were speedily much modified, either by not being acted on, or by authoritative alterations. That the desirableness of the army as a field for the efforts of young medical men has become in consequence lowered, and the number of candidates for admission to the service lessened; and that from these causes, as well as from numerous others originating with the army medical executive, the number of vacancies in the medical department of the army has become alarmingly great, and the safety of the army, especially in the event of war, has become much compromised. May it therefore please your Honourable House to grant a committee of inquiry into all the circumstances connected with the existing state of the medical department of Her Majesty's army, as they relate particularly to the relative rank and privileges, and the authority in purely medical or sanitary matters of the medical officers of the service, and also to other subjects of complaint arising out of what your petitioners respectfully think the mistaken views of the medical executive. And your petitioners will ever pray. Signed, etc., Charles Ritchie, M.D., President."

## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.  
TUESDAY....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
SATURDAY....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

## TO CORRESPONDENTS.

\* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

A MEMBER AB INITIO.—The announcement of the name of the successful Hastings essayist for this year will take place, we believe, at Cambridge.

F. A.—The three deaths from chloroform alluded to in last week's JOURNAL, occurred in the Middlesex, King's College, and St. Mary's Hospitals.

THE HOSPITAL FOR STONE.—A correspondent asks us questions which we cannot answer; viz., "What are the names of the medical officers of the Hospital for Stone? and where can be procured the statistics of the hospital in question?"

F. T.—Our correspondent need be under no fear. It was quite understood that the Memorial of the Brighton Licentiate of Apothecaries' Hall was sent to the Council by the Fellows, simply for the sake of shelving it, without hurting the feelings of those gentlemen. If we understand aright the feelings of the College, there is not the very smallest chance of its accepting the proposal of giving ad eundem degrees to Licentiate of the Society of Apothecaries.

THE PROPOSED ALTERATION IN LAW XV.—SIR: Allow me to call the attention of the members to the proposed alteration of Law XV; viz., "that members whose subscriptions are not paid before 30th June, be charged 25s." It is very customary for members to pay at the annual meetings of the various Branches; and I feel sure that such an alteration, if carried, would be exceedingly offensive to the members, and injurious to the welfare of our Association. The intention is, no doubt, to avoid arrears; the result would be resistance on the part of those fined, and withdrawal, if the additional is enforced.

I think the general meeting will probably take this view of the proposition, and it will be wise to let well alone.

I am, etc.,  
SAMUEL WOOD,  
Secretary of the Shropshire Scientific Branch.

Shrewsbury, July 15th, 1864.

SIR: I think the alteration of Law XV of the Association, as proposed on the motion of Dr. Styrup for the annual meeting at Cambridge, "that members whose subscriptions are not paid on the 30th of June, be charged 25s", is likely to act prejudicially to the best interests of the Association. I trust, for the welfare of the British Medical Association, it will be rejected.

I am, etc.,  
WM. ERDOWES.

Pontesbury, July 14th, 1864.

A HINT FOR THE ECONOMISTS.—A correspondent writes: "I am sure the officers of the Medical Department of the Army will feel grateful to the Branch in London for all their efforts to improve their status and position. I only wish I could see more prospect of success attending them. As you say in your leading article, the notion that third-class men are good enough for the army, is totally opposed to the principles on which the Army Medical School was established. Indeed, if such a notion is to prevail, the school becomes little else than a farcical piece of extravagance, and the sooner it is shut up the better."



# Lettsomian Lectures

ON

## MIDWIFERY AND DISEASES OF WOMEN.

*Delivered before the Medical Society of London.*

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

### LECTURE III. (*Continued.*)

#### THE TREATMENT OF FIBROUS TUMOURS.

Secondly, we have to consider the cases of fibrous tumour of the uterus for which gastrotomy was performed; and the whole uterus, tumour, or part of either, were removed. (See Table III.)

The cases to which I shall refer are thirty-three in number. The particulars of another, which I have heard of, I have not been able to obtain.

These cases consist of four of Dr. W. L. Atlee, one of Dr. T. L. Atlee, one of Mr. Heath of Manchester, one of Dr. Sloane, two of Mr. I. Baker Brown, one of Dr. Boyd, three of Dr. Clay, one of Dr. Granville, one of Dr. Parkman, one of Mr. Lane of London, two of Dr. Peaslee, three of Dr. Kimball, one of Dr. Burnham, one of Dr. Nelson, one of Dr. A. F. Sawyer, three of Mr. Spencer Wells, one of Mr. Fletcher, one of Dr. Hakes, one of Mr. Cadge, and three of Dr. Kœberle. For notices and references to several of these, I am indebted to Mr. Clay's translation of Kiwisch on the *Ovaries*. To the same gentleman I am indebted for correcting some errors in some of his cases published by others. To Mr. I. B. Brown, to Mr. Wells, and to Mr. Cadge, I am indebted for the report of three other cases; to the distinguished physician of Strasburg, Dr. Kœberle, for notices of his three cases; as well as for the reference to Dr. Kimball's cases, which he kindly gave me.

A *résumé* of these cases establishes the following conclusions.

Where these particulars are noted, nine were married, and only four single.

Where the age is given, in two it was between 20 and 25; in one, between 25 and 30; in four, between 30 and 35; in two, between 35 and 40; in seven, between 40 and 45; in three, between 45 and 50; in two, between 50 and 55. One recovered between 20 and 25; one between 35 and 40; and two between 40 and 45. All the rest whose ages are given died.

The gross mortality of the entire thirty-three cases was twenty-three; the recoveries, ten.

As to the causes of death, nine died of hæmorrhage. In four of these cases, it was found that the hæmorrhage was due to the ligature having slipped *after* the operation, or being insufficiently tightened. In two other of the cases of death, the cause was probably excessive hæmorrhage *during* the operation. In most of these cases, it is also remarkable that it is not stated whether the pedicle left was transfixed, or the clamp used—a fact which may in some measure explain the loss of blood, the ligatures being insecure. Four patients are said to have died of peritonitis; two of gangrene of the intestines; one of pleuritis; one of poisoning; one of pus in the veins; one of phlegmo-

nous erysipelas of leg; one of inflammation brought on by a fall; and the rest of shock, between four to thirty-six hours after the operation.

The study of these cases, however, admits of a more practical application when divided into three classes: 1. Extrauterine cases; 2. Parietal or intrauterine; 3. Cases where the uterus and ovaries were removed.

1. There were fifteen cases of extrauterine tumours extirpated. Five of these cases recovered, although one died three years afterwards of some obscure abdominal disease; three died of hæmorrhage; in two, owing to the slipping of the ligature—an accident which in our days could scarcely occur, with our improved means of securing cut surfaces; one died of shock; the remainder, of inflammatory complications. This gives an average mortality of 66 per cent.; or, if we exclude the two hæmorrhage cases, where death arose because the ligatures employed were insufficient, of 61.4 per cent. But, in three more of the fatal cases, enucleation was performed—a proceeding which I believe is unwise, when made by gastrotomy from the outer surface. It is precisely on the surface that we have the large vessels; and although, after a time, the uterus may contract till the enucleation is completed, they continue to bleed very freely. Again, as in contraction after pregnancy, the uterus partially relaxes again; secondary hæmorrhage may occur, and death follow. And here I may refer, as an argument against enucleation, to the effect produced by wounding a fibrous tumour through its uterine envelope by gastrotomy. Looking to some of the cases before given, it will be seen that, in two of these, the uterus was punctured externally in making the incision. In three others, it was purposely punctured by the trocar. In all but one—Mr. Hakes's fibrocystic case—the hæmorrhage was excessive from such openings. In the case I saw, the blood gushed out as from a pump. In two other cases, in one of which I saw a puncture made through the vaginal wall by a small exploratory needle, and in another which I myself punctured by a very small trocar, the hæmorrhage was also excessive, and could only be controlled by the actual cautery. This point is of practical importance in making exploratory punctures through the abdomen, and pointing out the great risk of enucleation or puncturing a solid tumour through the external coating of the uterus.

2. In the next class of cases, where the tumours were *parietal*, or partially *intrauterine*, involving the uterus itself, in some cases fibrocystic, the result is much more deplorable; and, out of nine extirpations of this kind, there were eight deaths, and only one recovery. Of the deaths, five were due to hæmorrhage. Here, again, however, the cut surfaces were not well secured. In one, there was oozing from the cut surface; in two others, the ligature slipped. In four examples, again, only *portions* of the diseased mass were removed. This, for the reasons before said, would be a dangerous course. The low vitality of the cut tumour would necessarily lead to its gangrene, and, as a consequence, to the death of the patient. In one of these, we had death from pus in the veins at the *post mortem* examination; in another, erysipelatous inflammation of the leg; in the two others, death from hæmorrhage. In these last, enucleation was again practised after gastrotomy. Hence the death from hæmorrhage and shock. And it is remarkable, that the only case in this category that

TABLE III.—Cases of Fibrous Tumours of the Uterus for which Gastrotomy was performed, and the Tumour or Uterus removed.

| No. | Operator and Reference.   | Age | Previous and General History.  | Steps of Operation.  | After Progress.  | Final Result.   |
|-----|---|-----|--|--|--|---|
| 1   | Dr. W. L. Atlee, of Philadelphia. <i>Am. Journ. of Med. Sci.</i> 1845.                          | 24  | Tumour occupied hypogastr. & r. iliac region; uneven, tender, only moveable superiorly. <i>Vaginal exam.</i> Extended below convex arch of pubis. Occupied pelvic cavity and pressing agst. perineum. Cld. be moved independently of uterus, when this was raised in pelvis. In the centre was a ridge, about as thick as finger, occupying central position, and running in an antero-poster. direction. In its anterior end was the os. Backache. Tumour after extraction was in various diameters, 1 ft. 7 in., 1 ft. 6½ in., and 1½ in. <i>Extrauterine.</i> | Operated Aug. 28, 1843. Free incision 8 in. from umbilicus to pubes, w. peritoneum. This last taken up and cut open. Intestines forced out, with difficulty returned. Four oz. of serum exuded. Tumour found occupying right side, and dipping deeply in pelvis; and upon passing the index finger of each hand, it was elevated. Immense pedicle from the tumour to the r. side of uterus, thick, vascular, 1 to 2 in. broad. Transfixed by a needle, tied & cut. No bleeding. Wound closed by 15 hare-lip sutures. | Immediate effects, vomiting & tenesmus. Peritonitis followed, which was subdued. Pedicle, of ligature came away on 8th, all the rest on 1-th. Convales. Sept. 18, 21 days after operation. | Returned home Sept. 25. Cured 25 days after operation.  |
| 2   | Dr. T. L. Atlee. <i>Ibid.</i> , vol. 35. 1845, p. 335. <i>Atlee's Table.</i>                    | 42  | Disease of uterus fibrous. <i>Extrauterine.</i>  | Operated 1843. Long incision. Several adhesions; 4 uterine tubercles with thick vascular pedicle.  | ..   | Died from hæmorrhage 5th day, from slipping of ligature.  |
| 3   | Dr. W. L. Atlee, <i>Am. Med. Jour.</i> 1855.  | 39  | Married. Menses present at time of oper. & cont. without interrupt. Found to weigh 6 lbs. <i>Extrauterine.</i>   | Operated August 28, 1844. Incision from 1 inch above umbilicus to pubes.   | ..   | Recovered, but died 39 days aft. oper. of cholera.  |
| 4   | Ditto. <i>Ibid.</i>   | 45  | Married. Found to weigh 6 lbs. <i>Extrauterine.</i>  | Operated May 29, 1851. Incision fr. 2 in. above umbilicus to pubis. Omentum and sm. intestines forced out, with diff. replaced. Operated Mar. 3, 1853. Incision fr. 2 in. above umbilicus to pubes. Tumour, found imbedded in substance of uterus, was enucleated. Small intestines forced out, with difficulty replaced.  | ..   | Died 3rd day from hæmorrh.  |
| 5   | Ditto. <i>Ibid.</i>   | 40  | Married. Three fibrous tumours, weighing 4 lbs. <i>Extrauterine.</i>   | Operated Mar. 3, 1853. Incision fr. 2 in. above umbilicus to pubes. Tumour, found imbedded in substance of uterus, was enucleated. Small intestines forced out, with difficulty replaced.  | ..   | Death from peritonitis 3rd day.   |
| 6   | Mr. Heath, of Manchester. <i>Lond. Med. Gaz.</i> vol. 38, 1843, p. 309.                         | 46  | Single; never pregnant; anæmic. Suffered fr. menorr. 4 yrs. 12 mos. ago noticed tumour in abdomen, size of large orange, & occupying l. hypochond. On palpation, felt like uterus of woman 7 mos. gone. Diagn. ovarian disease. Tumour found to weigh 6 lbs. <i>Intrauterine.</i>  | Operated Nov. 21, 1843. Incision from ensiform cartilage to half inch above pubes. Tumour came into view recognised to be uterus filled with solid matter. Removed <i>en masse</i> . Transfixed, 2 ligatures being placed on cervix and broad ligaments.   | Immediate effects, sickness. Collapse 14 hrs. after operation.   | Death 18 hours after operation. <i>P.M.</i> Internal hæmorrh. oozing from cut surface of uterus.                |
| 7   | Dr. J. Sloane. <i>Braithwaite</i> , vol. 37, p. 201.  | ..  | Tumour began 3 years ago, mistaken for an ovarian by Mr. Eddison of Nottingham, and believed to be so by two surgeons of the hospital. <i>Extrauterine.</i>  | Operated. Incision in median line; bleeding profuse. Old firm adhesions between uterus and abdominal wall. Several cysts cut through. Pedicle, nearly circular, tied.  | Syncope at first, rallied subsequently a little, but   | Died five hours after operation.  |
| 8   | Mr. I. B. Brown. <i>Braithwaite</i> , 45, p. 210. <i>Lond. Med. Rev.</i> 1862, 520. L. S. Home. | 34  | Had been very weakly; got better under tonics. The tumour perfectly mobile, and was supposed to be ovarian. It had grown rapidly. After removal, weighed 7 lbs. A hysteroma. <i>Parietal and intrauterine.</i>   | Operated. Explorat. incis. Some hæmorrh. from portion of tumour slightly wounded. Found to grow fr. within walls of uterus. Tumour firmly tied by two double ligatures passed through it. All portion above ligam. cut off. Stump of uter. kept outside.   | Progressed at first favourably, but subsequently died.   | Died. <i>P.M.</i> Pus in iliac veins. Peritonitis. Intestines glued together.                                   |
| 9   | Dr. J. M. Boyd <i>Am. Journ. of Sci.</i> 1856, vol. 33, 572.                                    | ..  | Previous history not given: a negro. Uterine tumour; not otherwise defined. Weight after operation found to be 45 lbs. <i>Involving entire uterus.</i>   | Operated June 13. Incis. fr. umbil. to pubes. Tumour found to extend beyond umbilic. Incision, therefore, extended 1½ in. higher. Tumour found attach. to sacral & lumbar verteb. involv. uterus & adher. to ovaries. Adhesions torn, ligamts. severed, leaving only vagina attached. Cervix now transfixed, 2 ligatures, lateral halves tied. Pedicle secured at lower part of incision. Spermatic artery of right side only required ligature.   | Hæmorrh. about 10 ounces from various sources. The ligatures of the pedicle came away 16th day. In March, patient resumed her avocations.  | Cured.  |
| 10  | Dr. Clay. <i>Med. Times</i> , No. 164, and Lee, p. 208. R. Lee, <i>Med. Ch. Tr.</i> 34, p. 21.  | 45  | Tumour size of gravid uterus at 8th month. Hard, unyielding, tubulated, moveable, not fluctuating. Tumour after removal weighed 12 lbs. and included part of os and cervix. Supposed ovarian. <i>All uterus and ovaries.</i>   | Operated in 1842. Incision 18 inches. Tumour exposed; had a broad attachment, the greater part of uterus forming tumour; great difficulty in securing exposed vessels. <i>Both ovaries, which were diseased, and entire uterus removed.</i>  | Attacks of Syncope.  | Died 1½ hour after operation, of shock. Ligature found aft. insuff. to compress thickened neck of uterus.       |
| 11  | Dr. Clay. R. Lee's paper, <i>Med. Chir. Tr.</i> 34, p. 21.                                      | 52  | Enormous enlargement of abdomen of 16 years' duration. Uterus after operation found to be enlarged to 12 lbs. Ovaries and uterus diseased. <i>All uterus and ovaries.</i>  | Operated in 1844. Incision 12 inches. Both ovaries and uterus removed, converting vagina into a cul-de-sac.  | The wound healed, ligatures thrown off, & progressed rapidly to recovery when she acid. fell heavily when the bed was making to the gr'd.  | Died 15th, of secondary inflammation induced by the fall.   |
| 12  | Dr. Clay. <i>Lancet</i> , 1863, 418.  | ..  | Fibroid uterus, 75 lbs. wt. Ovaries fid. unhealthy, filling up entire cavity of pelvis as to render defæcation very difficult. <i>Involving all uterus and ovaries.</i>  | Operated in 1863. Entire tumour and ovaries removed, leaving only a small piece of cervix.   | ..   | Recovery complete.  |
| 13  | Dr. Granville, Dr. R. Lee. <i>Med. Ch. Tr.</i> 34, p. 14.                                       | 30  | Tumour supposed to be ovarian, but examined by Dr. R. Lee, and found to be fibrous tumour adherent to fundus by a small thick pedicle. Wgt. 8 lbs. <i>Extrauterine.</i>  | Operated March 21. 1827. Incision nine inches long.  | ..   | Died. A portion of small intest. came in contact with pedicle wh. incised, and became infiltrated & gangrenous. |



TABLE III—continued.

| No. | Operator and Reference.  | Age | Previous and General History.   | Steps of Operation.   | After Progress.   | Final Result.   |
|-----|--|-----|---|---|---|---|
| 14  | Dr. S. Parkman.<br>America.<br><i>Lynan's Report</i><br>Bost. 1856.  | 27  | Single. Tumour of one year's duration. Regular. Tapped, but no fluid followed. Fibrous Tumour of uterus, weight 8 lbs. 13 oz. <i>Parietal, involving entire Fundus.</i>   | Operated Jan. 8, 1848. Incision from ensiform cartilage to pubes. Ascitic fluid escaped on making incision. Tumour tapped; no fluid followed. On being raised, found to be a fibrous growth, involving entire fundus. Ligature applied through and around lower part of organ, tied with great force. Tumour excised. Both ovaries healthy.   | ..  | Died of hemorrhage, 12 hours after.   |
| 15  | Mr. Lane.<br>London.<br><i>Clay's Table</i> ,<br><i>Kiwisch Trans.</i>   | 43  | Twice married. No children. Disease of 8 or 9 years' duration. Cyst spontaneously disappeared 5 successive times, at intervals of about 12 to 18 months. For the last 2 years before the operation, the cyst did not give way, and she was 3 times tapped. Health good. <i>Extrauterine. Fibrocystic.</i>   | Operated Feb. 15, 1844. Incision 7 in. A pedicle was formed of that part which sprang fr. uterus. Temp. ligat. were first applied, the cyst was then severed close to temp. ligat.; afterwards 6 perm. ligat. were applied each including about 1 inch of the cut edge of the portion of the cyst left attached to the uterus. The pedicle was left within the abdom. cavity. Wound united by 7 sutures. Not within the peritoneum.   | Pulse rose from 80 to 120 the 1st day. On the 2nd was 130, on the 3rd it had fallen to 100.   | Patient recoverd. in three weeks. Married three years after operation, and again in a year. Died 1½ year after, of disease of bladder.      |
| 16  | Dr. E. R. Peaslee.<br>America.<br><i>Am. Journ. of Med Sci.</i> 1855, p. 393.  | 35  | Widow with 4 children. Tumour in right iliac region noticed 18 months previously. Leucorrhœa. Dysuria. Numbness of the extrem. Had pelvic inflammation after her last child, 17 months back. Tum'r moveable, falling into lower pelvis when she is erect. Catheter necessary for several weeks. Sound penetrated 3½ in. Uterus moveable while the tumour is fixed. <i>Extrauterine.</i> | Operated Sept. 1853. Incis. 6 in. Trocar thrust in what appeared a dense sac filled with fluid. <i>Nothing but blood followed.</i> Incision enlarged; tumour then found to proceed from uterus. <i>Trocar puncture was bleeding freely.</i> Operat. c'd not be suspens. Attempts to vomit, & intestines protruded. Incision extended, & ligature placed ar'nd uterus as soon as pos. & excised. Hæmor. did not exceed 6 oz. Ligatures brought out at lower angle of wound, by side of wh. a gum elastic tube was left introduced. Wound united by 6 needles carried thro' the peritoneum. | ..  | Died, Peritonitis 5th day.  |
| 17  | Dr. Kimball.<br><i>Bost. Med. and Surg. Journal</i> , 1855.  | ..  | Anemic. Unable to lay on her back. Hemorrhage at the periods fearful, likely to prove fatal. Tum'r occupied centre of abdomen. Form globular, large; diameter probably 7 inches. <i>Vaginal examination:</i> Cervix normal. Sound penetrated 4 to 5 inches. <i>Diseased mass was so high up in abdomen that could not be felt per vaginam. Involving all uterus.</i>                    | Operated Sept. 1. Incis. 4 in. thro' median line upon projecting tumour. Attempt made to enucleate first, so as to remove diseased mass, and thus make smaller openings. This was done with difficulty. Uterus then drawn out. Transfixed with double ligature at suppos. union w. cervix. Superior part then amputated. Wound brought together by 4 sutures. 4 oz. of blood lost.  | Recovery somewhat retarded by nausea and vomiting, retention of urine, etc. Convalesc. quite in Jan. Ligatures removed very long, not away till July. | Recovery complete.  |
| 18  | Dr. Kimball.<br><i>Ibid.</i> p. 254.   | ..  | Supposed ovarian. Enormous irregular and lobulated tumour, involving uterus only.   | Whole diseased mass and organ removed.  | Favourable for six days, 7th got ill.   | Died 10th day.  |
| 19  | Dr. Kimball.<br><i>Ibid.</i> p. 254.   | ..  | Particulars not given. Fibrous within walls of uterus. <i>Parietal.</i>   | Uterus extirpated.  | Favourable for two days.  | Died 3rd day, from shipping of ligature.  |
| 20  | Dr. Walter Burnham, of Lowell.<br><i>Nelson's Amer. Lancet</i> , Jan. 1851.  | ..  | Also copied in <i>Worcester Medical Journal</i> , February 1851.  | Uterus and both ovaries extirpated.   | ..  | Recovered in two months.  |
| 21  | Dr. Nelson.<br>America.<br><i>Amer. Medical Monthly</i> , 1859-60.<br><i>Bost. Med. and Surg. Journ.</i> 1859-60, 507. | ..  | Of 5 months standg., and consisted of 3 lobes, of which largest filled whole of left iliac region, and ext. to the ribs and to the right of linea alba, causing much distress by compressing chest and stomach. Diagnosed to be ovarian cyst. <i>Extrauterine.</i>  | Two largest lobes removed by the knife, leaving a stump three inches in diameter.   | Ligature came away a few mos. aft. without patient's knowledge. <i>Ibid. Journal</i> , 1858, 257.   | Recovered without a bad sympt. Died 3 years aft. of obscure abd. disease, w. fistulous opening in intestine.                                |
| 22  | Dr. A. F. Sawyer, of San Francisco.<br><i>Am. Journ. of Med. Sciences</i> , 1860, 46.                                  | 43  | Married, 4 children. Tumour first noticed 1849. In 1855 was of size of two fists in centre of abdomen, sinking when erect in pelvis. In Oct. 1856, confined of a healthy child. After this, uterus could no longer be felt, and tum'r resumed its position in pelvis, which was moveable. <i>Parietal.</i>  | Operated under ether. Incision from a above umbil. to pubes. Was a large solid growth imbedded in parietes like an enormously hypertrophied uterus. Ovaries rested on either side of tumour, left healthy, right hypertrophied. Transfixed by a ligat. below cervix, all above removed. Ligatures left hanging out of wound. Tum'r was calcareous, mixed up with fibrilastic ingredient, and muscular and cerebriiform matter.  | Favourable up to 4th day, when rigors occurred, nausea, vomiting. Pulse 140.  | Died 6th day. PM. Peritonitis. Sanguinous fluid and clots, 10 oz. Ligat. on stump of wound somewhat loosened. Death from secondary hæmorrh. |
| 23  | Mr T. S. Wells, of London.<br>Communicated and Operation seen.   | ..  | Interstitial fibroid of uterus in right uterine wall, of months' duration. Severe menorrhagia. Obscure fluctuation. Tumour extending above umbilicus. Weight found to be 17 lbs. <i>Parietal.</i>   | Gastrotomy. Tumour wounded accidentally with knife. Fearful hemorrhage. Large vessels on surface. Tumour evacuated, uterus contracting afterwards. Edges of wound tied. Portion right side of uterus hypertrophied or fibroid.  | Collapse. Exhaustion.   | Death four hours after from shock and hæmorrhage  |
| 24  | Ditto.<br>Communicated   | ..  | Solid fibrous tumour of uterus, weighing 25 lbs.  | All the uterus excepting the cervix and both ovaries removed.   | Went on well for three days.  | Died fourth day from poisoning.   |
| 25  | Ditto.<br><i>Path. Trans.</i> xiv, 201.  | 53  | Single. A case of fibrocystic pedunculated outgrowth. Right side of fundus. Weight, 16 lbs. 1 oz.; and a large cyst which had held 26 pints of fluid, and 4 lbs. of lumpy masses of decomposed fibrine. <i>Fibrocystic.</i>   | Operated upon as for ovariectomy. No important adhesions. Right ovary attached to tumour and removed. Left connected to uterus.   | Shock.  | Died four hours after operation.  |

TABLE III—continued.

| No. | Operator and Reference.  | Age | Previous and General History.   | Steps of the Operation.  | After Progress.  | Final Result.  |
|-----|--|-----|---|--|--|--|
| 26  | Mr. Brown. Communicated by Lond. Surg. Home.   | 45  | Single. Admitted May 6, 1860. Health good up to last 5 or 4 yrs., when she had faintness and epistaxis. Regular up to Oct. last. Nine years ago disc. small tum'r. side of abd., this did not inc. till 3 or 4 years ago. Had grown rapidly last 6 months. Had pneumonia 10 yrs. back. Last March had erysipelas. Examination: Small ovarian tum. also a solid mass above pubis like an enlarged uterus. Sound only gets within the os. Hymen perfect. Lungs sound. Heart healthy, but weak. <i>Fibrocystic.</i>  | Operated May 15. In dissecting as far as peritoneum, the cyst found to be so adherent that, in endeavouring to break it down it was ruptured and three or four pints of fluid escaped. A firm fibrous mass was then discovered bound down by such firm adhesions that it could not be moved. Therefore a piece of cyst on each side was cut off, and the wound closed as usual.  | Went on pretty well till the 20th, when fluctuation became distinct over abdomen. w. erysipelatous redness. Pulse quick. Tongue dry and foul. 31st, began to sink.                           | Died June 8, of phlegmonous erysipelas of left leg. The same epidemic prevailed in the hospital.   |
| 27  | Mr. Fletcher. Communicated by Dr. Grimsdale.   | 40  | Widow with 5 children. Three miscarriages. Ceased to menstruate 6 months ago. Tum'r first noticed 13 months ago on right side. Circumference of abdomen, 37 in. Tum'r moveable, containing large masses of solid matter. After operation, tumour found to weigh 144 lbs. Struct. identical with uterine fibroid tum'rs, studded with cysts of various sizes. <i>Extrauterine. Fibrocystic disease.</i>  | Operated May 14, 1862. Incision, 5 in., from 2 in. below umbil. Anter. surface of tumour closely adherent, & 3 in. of edge of omentum to tumour on right side. Trocar passed into tumour, scarcely any fluid came. Incision extended to 2 in. above umbilicus. Many cysts ruptured or punctured. Tumour found to spring from back of uterus below the fundus and to left of median line. Its base (it could hardly be called a pedicle) was about 1½ in. diameter. This was cut with écarateur in about 20 minutes. Two ligatures of iron wire put on vessels which bled on the cut uterine surface. Ligat. cut short and left. Wound closed by pins and fig.-of-8 sutures, and superficial sutures. Abdomen not sponged out.                    | Vomited once or twice the night and day after operation; complained of pains like afterpains in the uterus. These relieved by gruel, 1½ oz. muc. opii, 20 minims. Had very little stimulant. | Recovered well. Re-admitted into hospital a few months since, with eczema otherwise well and fat.  |
| 28  | Mr. Hakes. Brit. Med. Journal, Feb. 28, 1863.  | 42  | Married. Had 2 children, youngest 15. Enlargement first noticed 18 months ago. Then appeared to have abd. full of ascitic fluid, & a harder tumour below. Tapped; several pts. of amber fluid liberated, when an irreg. nodulated tumour was felt. Uterus moveable, but less so than usual. 9 months ago, tapped again, and when about 1 pt. of fluid had come away, cannula came agst. a hard tumour. Ten days aft. again tapped high up above umbilicus, and a large quantity of fluid came away. Cysts and solid tum'r rem. behind. <i>Diagnosis made ovarian dropsy. Extrauterine, fibrocystic.</i> | Operated Jan. 29, 1863. Incision usual length, to an in. above umbilicus. Tumour found adherent to omentum & intestines. Connected by a small band, with scarcely a pedicle. This was transversed by double ligature, and both sides tied, a third wire encircling the whole. Tumour was found to be made up of cysts of narrow sizes with thin walls. One or two, however, with solid bloody matter. Right ovary was felt to be somewhat enlarged. Some fluid escaped in abdomen, which was sponged out.  | For several hrs. appeared to be doing well. Still never rallied.   | Died 33 hours after operation, from shock. P.M. No inflammatory action; wand. firmly hld. Both ovaries dis. each cont. 2 or 3 small tumours. Small polypus found on cervix uteri, and 1 or 2 fibroids imbed'd in uterine wall. |
| 29  | Mr. Cadge, of Norwich. Communicated 1864.  | 30  | Single. Health good. Five years' growth. Generally regular, at one time there was slight sanguineous drain, never hæmorrhage. Tumour was in abdomen, size of 8 months pregnancy. Diagnosed at Norwich and in London to be ovarian. <i>Parietal.</i>   | When abdomen was opened, tumour rolled out. Tapped; found solid. Uterine wall now peeled off and tumour enucleated. 3 or 4 large vessels tied, and then redundant uterine flaps, wh. had cov. the growth, rmov. As the bleeding was, however, very free, to check this, & also remove any smaller tumours, wh. might & probably did exist, a strong double ligature was passed thro cervix, and lateral halves tied, and whole uterus and ovaries removed. There was no more bleeding.   | ..   | Died of shock apparently, 36 hours after operation.  |
| 30  | Dr. E. R. Peaslee. America. Am Journ. of Med. Sci. 1855, p. 393.                     | 35  | No account of duration. Tumour was found to be a uterine fibroid, 54 in. long, 4 broad, and 3 thick. <i>Extrauterine.</i>   | Operated Sept. 21, 1833. Incision 6 in. Tumour taken for fluctuating one; punctured with trocar. Great hæmorrh. A ligat. was then applied round neck of tumour & whole body above the ligature excised.  | ..   | Death on 4th day, from peritonitis and gangrene of intest.   |
| 31  | Dr. Keberle. Med. Gaz. of Strasburg. No. 10, 1865. Presse Medicale Belor. Nov. 1865. | 30  | Married 6 years. Nervous. Began to menstruate at 15. No children. Miscarriage 5 yrs. ago at 3 months. Then noticed hard tumour left side of pelvic region. This was made out to be a uterine fibroid. It grew without disturbance of gen. system. 3 years ago, believed to be a mixed tum'r. Arsenical pills and leeches iron prod. no effect. Micturition difficult. Menorrhagia w. sickness at the epochs. In present state, tumour believed to be ovarian or fibroid of uterus.  | Operat. April 20, 1863. Incision 3½ centim. above umbilicus to 3 above pubes. Little bleeding. Tumour free from adhesions superiorly, but connected w. epiploon by 3 arteries as large as radial. Ligat. & cut. Tumour found to be solid. Incis. enlarged. Pedunculated tumour came out, and was secured by the chain of an écarateur. Intestines were now moved aside. Uterus found large, containing a fibroid size of nut. Right ovary healthy; left large, w. Graafian vesicle on it ready to burst. Cervix transfixed, double iron ligature applied including broad ligaments and ovaries. The whole part above the ligatures cut. Cavity of abdomen cleaned out. Ends of cut portion touched with perchloride of iron. Other vessels tied. | Very fair pulse, never rose above 105. Suff'd from cough. Ligature came away on 13th or 14th day.  | Recovery complete with day.  |
| 32  | Keberle. 2nd case.   | ..  | Ascitic for a long time, obliging patient, by the trocar every 5 days, to remove 12 or 13 pints of serum. Operation one of urgency. <i>Pedunculated Extrauterine.</i>   | Operated December 5, 1863. Adhesions very extensive and highly vascular. Twenty ligatures applied both to arteries and veins.  | ..   | Died of peritonitis as a result of the recurrence of ascites.  |



TABLE III—continued.

| No. | Operator and Locality.   | Age | Previous and General History.  | Steps of the Operation.   | After Progress.  | Final Result.  |
|-----|--------------------------|-----|--|---|--|--|
| 33  | Köberle.<br>Communicated | 24  | Tumour weighing 33 kilog. 5 yrs. ago, observed abd. was enlarging. First came a suspicion of pregnancy, then of an ovarian tumour, duct being very evil. Tapped 7 times without effect. In 1863, belly enorm. swelling ext. to scaphoid cartilage. Dyspnoea urgent, face cyanosed, decubitus lateral. Fluctuation was so evident, she was again tapped, blood only exuding. Walls of abd. slightly oedematous.<br><i>Extrauterine, Pedunculated.</i> | Operated March 4, 1863. Incis. 55 centim. Large fibroid exposed, which at the least succussion shook like jelly, adherent to epiploon by large tortuous vessels. These tied and cut on both sides. Ovaries healthy. Metallic ligature put around pedicle, wh. was about size of a fist when cut. At least 2 litres of blood came away from cut end. Parts now sponged. Large bleeding veins tied. A small superficial part of adherent liver having been removed, exuded bile and blood. This was arrested by the perchloride of iron. Operation lasted 2½ hrs. A small portion of air retained in abdomen. Wound closed. | For two first days did pretty well; 3rd, violent sickness, and death from exhaustion and dyspnoea. | Died March 8. P.M. Air absorbed. Wound two-thirds heal'd. Some serum inferiorly from oedematous walls. Tumour entirely disappeared. No phlebitis or false membrane. Two litres of sero-purulent fluid in right pleura. Death thus due to pleurisy. |

recovered was one in which it was stated that all the uterus except the cervix was removed. All in and about the diseased organ was removed.

3. The last category of cases, however, appears to be most interesting. In all, they amount to nine, with four recoveries. One death here appears to have resulted from hæmorrhage, the ligature not having been sufficiently secured; and one death was purely accidental.

This last, one of Dr. Clay's, had all but recovered; the wound had healed; the ligatures had come away; and she was progressing rapidly towards convalescence, when she fell heavily to the ground when the bed was making. The shock to her system appears to have determined inflammatory complications, of which she died.

These last two cases should, therefore, fairly be excluded. This would give seven cases, and four recoveries—more than half. In all these, the ovaries (with the exception of one case, one of Mr. Wells, in which one ovary only was removed) were extirpated, as well as the entire uterus. And, in order that this should be done, the uterus must have been high up and well without the true pelvis.

It is obvious, however, on more closely reviewing these cases in which gastrotomy has been performed successfully, that it is precisely in those cases where the tumour was high up in the false pelvis, that the success has been greatest. Secondly, in those where the ovaries were removed, it is this same contingency which contributed to their ready extirpation also; and, thirdly, it was also in those cases where the whole diseased mass was capable of removal.

The first contingency is the reverse of what we observed in cases of enucleation *per vaginam*. If such tumours are to be removed by gastrotomy at all, it is a favourable position. Secondly, a very little reflection will shew that it would be impossible, except in a case where the uterus and ovaries were high up in the false pelvis, to remove them *en masse*. For, if we look for a moment to the large vessels in immediate contiguity, the broad ligaments which have to be cut through, the position of the bladder, ureters, spermatic artery, the objections to the operation appear very great, almost insurmountable, if there be any extensive adhesions; and yet the only four cases on record, if we exclude extrauterine tumours, in which recovery has followed, have been the cases in which Drs. Clay, Burnham, Köberle, and Boyd removed both uterus and ovaries. And this could not have been effected, unless, as before urged, the uterus and ovaries had been well drawn up

outside of the true pelvis, where they could be easily got at and removed.

At *post mortem* examinations, with the abdominal walls opened low down, even to the front of the bladder, and when all the intestines are moved out of the way, even when the rectum is included, anybody who has tried it must have experienced how great is the difficulty to separate away the contents of the true pelvis. But, admitting it were possible, how could the arteries cut across be secured? and would it be possible to remove such a mass without wounding the large veins in this cavity?

[To be continued.]

## Transactions of Branches.

### BENGAL BRANCH.

ADDRESS IN MEDICINE: THE PRESENT STATE OF THE MEDICAL PROFESSION IN BENGAL.

By S. GOODEVE CHUCKERBUTTY, M.D.

[Concluded from page 88.]

THERE are now in the Calcutta Medical College three classes of students: the first created, or the English class; the next created, or the military class; and the third created, or the Bengali class. Into each of these, young men of all castes, creeds, and colours, of all nations and countries, are freely admissible; and from them have annually gone forth into the world large numbers of physicians and surgeons. Connected with this College, there is now a magnificent hospital, in the wards and dispensaries of which relief is afforded to a vast number of patients, in every department of the profession; an extensive museum of anatomical, pathological, zoological, mineralogical, and pharmaceutical specimens; a fine chemical laboratory; a good library; and vast dissecting accommodation. Following the example of Calcutta, similar medical schools have been formed also at Bombay, Madras, Hyderabad, Agra, and Lahore. Thus there are now six well-founded medical colleges in the country, three of which belong to our own Presidency; and numbers of good hospitals. In all these, a vast number of students are learning together, in honourable rivalry, every branch of medical knowledge imported from the best schools of Europe. We have side by side English medical schools and vernacular medical schools, English medical teachers and vernacular medical teachers, English medical practitioners and vernacular medical practitioners. Year after year, a fresh crowd of medical students are

passing our colleges and universities, and spreading themselves far and wide over the whole face of the country. They are to be found in the army, in all civil stations, in charge of jails and dispensaries, on board passenger-ships, in the service of the railway companies, in lucrative private practice, and in the employ of rich zemindars and planters. Not only towns, but even the villages, have commenced to reap the benefit of their advice. In Calcutta, they may be counted by scores; and the demand for their services is so great, that the humblest of them easily obtains a livelihood. Indeed, it is often difficult to get an unpassed second or third year's student, even of the Bengali class, to accept an appointment worth forty-five to seventy rupees (about £4:4 to £6:10) a month.

As was to be anticipated, the first difficulty of these youths was to contend with the *Koberajes*, *Hakeems*, and other irregular practitioners of the old stamp; for we may be quite sure these men regarded with no affection the alumni of the new school. But, while their own numbers have gained strength by annual additions, those of their enemies have grown proportionately thinner, partly from want of room, and in part also from the augmenting credit of rational medicine. It would be hard to tell the exact number of new medical men engaged in practice all over the country; but, if we may venture to guess, we may say they may be counted by thousands. Of the students of our own Medical College alone, according to Dr. W. C. B. Eatwell, there were employed in 1860, in the service of Government, 85 subassistant-surgeons, 62 Bengali class native doctors, and 330 Hindustani class native doctors, giving a grand total of 477 officers. These numbers have during the past three years greatly increased; and, besides, when we take into calculation the number employed by the railway companies, tea-companies, planters and zemindars, passenger-vessels, and as private practitioners, and the numbers which have issued forth from the other medical schools, it will not be surprising if we said that there are now in India thousands of reliable native physicians and surgeons; whereas none of these were to be met with any where only thirty years ago. All of these practitioners are well to do in the world, and many of them have grown opulent and respectable members of society. The aggregate amount of wealth represented by them is considerable, when we come to think of the recency of their existence and the terrible obstacles they have had to surmount. Of the benefits they confer on the public no tongue can speak, nor pen describe; they are engraved in the hearts of the suffering multitude; and their extent and value can only be judged of by the great demand which has sprung up within so short a period for scientific medical aid among all ranks of the community.

This, we will say, is the bright side of the picture; but, like all pictures, it has a reverse side as well, which we shall now proceed to contemplate. The phenomenon we have seen has been so amazingly rapid in its growth, that it has almost taken the breath out of its immediate beholders. The spectacle was too dazzling to admit of an early scrutiny. People at first were too much rejoiced at the suddenness and mightiness of the apparition to look beyond the surface. We shall show that that was precisely wherein the danger lay. It was a danger that was lurking within and without the pale of the profession. The first years of this wonderful regeneration of medicine, under the skilful management of Mr. M. E. Bramley and Dr. H. H. Goodeve (to the latter alone being due the credit of introducing for the first time human dissection and the study of practical midwifery into this country), were years full of confi-

dence and hope. The pride of knowledge was the all-absorbing passion depicted on the faces of the youths who crowded the lecture-rooms of their infant institution. The progress and enterprise of the native medical students were the great topic of the day. All true friends of India were glad of their success. Lord William Bentinck, Lord Macaulay, Sir Charles E. Trevelyan, Sir Edward Ryan, Dr. John Grant, Mr. David Hare, Baboo Dwarikanath Tagore, were the great men who did everything in their power to foster and encourage them. The chemical experiments of Dr. W. B. O'Shaughnessy attracted admiring crowds of spectators, who, as well as the regular pupils, might have been seen fascinated to the benches on which they sat by the new truths that were every moment bursting to their observation. Truly, they might have exclaimed, "All this must make us wiser and better than our forefathers, and yield great pecuniary advantages!" Buoyed up with hope, petted by the great, and intoxicated with knowledge, the first band of students laboured with a zeal and determination which astonished even the Orientalists. A series of triumphs greeted them as the result of their first examination. A batch of diploma-men received their honours amid the admiration of a crowded assembly, and Dr. John Grant delivered a telling oration to signalise the event.

Now came to be tested the money-value of those diplomas; and the Government of the day was prevailed upon to offer to the successful candidates a salary of 100 rupees each *per mensem* in the public service. The young men, it was said, felt deeply mortified at this scale of remuneration; nevertheless, since they had then as yet no experience of the prospects of private practice, most of them accepted service on the terms proposed. The Government, with its usual liberality, at once proceeded to open dispensaries for the poor in the principal civil stations; and, by the recommendation of the Committee of Examiners, appointed to their charge the newly passed young men, as subassistant-surgeons, under the superintendence of the civil surgeons. Baboos Nobin Chunder Mitter, Uma Churn Sett, and Rajkisto Dey, were the first to be so employed, and then promoted to higher pay, as their merits became duly appreciated. Some of those gentlemen here named now number among the dead.

One of the most illustrious of that batch, Baboo Dwarikanath Goopto, an honoured member of our Branch, was, however, immediately taken by the hand by the late Baboo Dwarikanath Tagore, whose unstinted liberality and public munificence were felt in so many directions. Baboo Dwarikanath Goopto at once became the family medical adviser of that noble-hearted patriot, and was by him introduced to a circle of rich friends, who, by their united allowances, secured for him an early independence. Baboo Dwarikanath Goopto lives now to favour our meetings by his presence; and it would do good to our Branch, if the younger members of the profession were to imitate his example. In him meet the events of nearly thirty years; and the early promise of his career is well sustained by the wisdom and activity of his maturer age; affording thus a literal fulfilment of the good advice of Dr. John Grant, when delivering his diploma some twenty-five years ago. His success is an earnest of what all can do by adhering simply to private practice. But, while admitting his case as a type of many others I could name, there is no denying the fact that several have sunk under the evils which lay below the surface. Some, puffed up by vanity, have shrouded themselves in self-conceit, and will on no account believe in improvements, which they regard as mere idle novelties; some, spoilt by unforeseen prosperity, have abandoned themselves to



lethargy and vice; some, contending fiercely with the ignorant *Koberajes* and *Hakeems*, have insensibly descended to the low level of these, and adopted habits and practices disgraceful for the members of a learned profession like ours; some, not satisfied with legitimate gains, have imbibed a sordid mercantile spirit, and become dead to all refinement of sentiments; some, wanting in good feeling and candour, have betaken themselves to evil-speaking, so that they might raise themselves by running down their neighbours; some, tired of industry and study, have gone astray into the easier paths of homeopathy, hydropathy, Morrisonianism, and cholera-curers; and lastly, some, who have both talents and energy, have conceived too great an opinion of themselves, and learnt to despise their brother-practitioners, with whom they think it mean to hold any intercourse, even for their common good.

All this is a matter of profound regret; for the conduct of the few has brought unmerited ridicule and discredit upon the whole body of members of a noble and honourable calling. What can be a surer proof of this, than the facility with which all sorts of charlatanism meet with a ready public to welcome their professors? What else will explain the alacrity with which a noted homeopathic practitioner has been recently installed as the health officer of Calcutta? The medical profession is sick within, and assailed by enemies from without. There is a canker within it, which is eating into its very vitals; a sore spot—a slough—which must be promptly amputated, if it is to reassert its dignity in Bengal. To perform that operation, and to unite the integral members by a common bond, is what is wanted; and it is precisely that object which the formation of the Bengal Branch of the British Medical Association contemplates. Our desire is to hold up to contempt all that is contemptible, and to commend for imitation all that is good and commendable. Thus shall we separate ourselves from all disreputable and irregular practices, and win back to our ranks those who have been led into temporary error. Our periodical meetings for the discussion of all medical questions are a most useful tribunal, the verdicts of which will go far to secure the advancement of the profession. More than this: they supply a much needed stimulus to exertion, and afford a congenial field for employment to ardent and unoccupied minds. Of this there can be now no manner of doubt. The experience of the last six months is a sufficient guarantee of what can be done; and it gives me real pleasure to congratulate the members of our Association upon this auspicious commencement of a new and bright era, the mark of which will be certainly left on the pages of Indian history. During the short time that has elapsed since the foundation of this Association, it has already received valuable contributions from a variety of gentlemen, among whom I may particularly notice the names of Dr. Chevers, our learned President, and of Drs. Fayer, Browne, Beatson, Juggobundo Bose, and Mohendro Lal Sircar; and of Baboo Unnoda Churn Kastogry, Nilmadub Haldar, and Calla Chand Haldar. Services such as theirs should be gratefully recorded, setting us, as they do, bright examples of public spirit, and adding very materially to our stock of information. But, while expressing our thankfulness to Providence for the glorious career which our Branch has already achieved, we have to deplore, in the untimely death of Dr. John Browne, the loss of an earnest and inestimable member. May it be long ere we meet with another such calamity! We are as yet a scanty band; for the roll of our members scarcely counts more than seventy. Nevertheless, I feel confident that a great future is now open before us, in which our profession will rise up before the

world in newness of strength and well-earned glory. I am convinced that we are in the right path at last, and that every day henceforth will find us more and more united, and ready to defend our common interests.

Yet, I must confess, we are far from accomplishing our mission quite so easily. There yet remain many difficulties to be overcome, many enemies to subjugate, and many errors to dispel. Even the metropolis of India is infested by a host of impudent harpies, who prey upon the credulity of the unsuspecting. Every druggist and chemist, every apothecary and quack, every sluggard, fool, and rogue, enjoys as yet full liberty to style himself a doctor and prescribe for the sick. Can this be allowed to continue without detriment to the public interests? Most assuredly it cannot. This confusion of the educated and the uneducated, the ignorant and the learned, the legitimate and the illegitimate, and the honest and the dishonest, is a most heavy misfortune, under which the profession will continue to groan as long as legislative interference is withheld for its benefit. That any disappointed Sircar or worthless European may set himself up as a medical practitioner by buying a few doses of quinine, castor oil, opium, and tartar emetic, and giving these out to the sick under false and bombastic names, is a most grievous wrong to legitimate medicine.

To show the extent of the evil, the different classes of legitimate and illegitimate practitioners who exercise our profession here may be enumerated as follows:—1. Government medical officers; 2. Private European physicians and surgeons; 3. Doctors and Licentiates of Medicine of the Calcutta University; 4. Graduates of the Calcutta Medical College; 5. Bengali and Hindustani class native doctors; 6. Dental surgeons; 7. Apothecaries; 8. Hospital apprentices; 9. Unpassed medical students; 10. Vaccinators; 11. Midwives; 12. Homeopaths; 13. Hydropathists; 14. Hygieists; 15. Cholera-curers; 15. Amateur quacks; 17. Women doctors; 18. Koberajes; 19. Hakeems; 20. Barber-surgeons; 21. Boydos; 22. Fakeers; 23. Sunyasis; 24. Mulls; 25. Priests of Hindoo temples; 26. Charmers; 27. Exorcisers; 28. Pathucks (readers of sacred writ); 29. Poison-extractors; etc.

Now, does not this afford ample evidence of the impunity with which anybody may turn doctor and play with the lives of his fellow-creatures? Does it not show the necessity of some kind of check? Does it not loudly call for the interference of the legislature, and extension of the English Medical Act to India? Surely the community is not safe when so many dangerous impostors are permitted to tamper with medicine, and prostitute it to the attainment of their selfish and wicked ends. Surely that social system is most unsound, which looks upon such things with complacency and unconcern. Let us hope, therefore, that the day is not far distant when these evils will be put down by the strong arm of the law, and none but men who have taken the trouble of duly qualifying themselves will be allowed to meddle with the health, honour, and lives of their fellow-creatures. Seconded by some such enactment, it is then, and then only, that we can hope for the full fruition of the noble end to which the efforts of this Association will be unremittingly directed, and which humanity and good policy alike demand at our hands. With the establishment of universities and good medical schools all over the country, there is now little excuse for inaction in this matter. The supply of regular medical men is increasing with every successive year, and no fear need any longer be entertained that there ever will be again a dearth of them. Mr. Robert Turnbull, Secretary to the Justices of the Peace, tells me that during the

past half-year the licence-tax was paid by thirty-two surgeons, three surgeon-dentists, thirty-nine licentiates of medicine, nine apothecaries, and one veterinary surgeon; giving a grand total of eighty-four men, exclusive of native doctors and others. Now, making due allowance for errors, on account of the great haste in which this tax had to be collected, and for the omission of native doctors (of whom, I am told, there are from sixty to seventy), we should not be far wrong if we put down the aggregate number at one hundred and fifty men practising European medicine in Calcutta. There are also, in this city, forty regular druggists' shops, seven charitable dispensaries, three large hospitals, and several smaller establishments of the same kind. So the Presidency, at all events, is already well stocked; and here the first trial might be made of affording protection to legitimate medicine. Then, as civilisation advanced into the interior, and people perceived their true interests, a general Act might be passed for the benefit of the whole country. That, I think, would be the wisest course to pursue at present; for, while I deeply lament the existing evils, I would equally deplore hasty legislation ere the public were sufficiently prepared to profit by it.

It might be considered foreign to the objects of this Association to speak upon the Government Medical Service; but an account of the present state of the profession in this country would be clearly incomplete without a word being said about that most important part of it. That service consists now of the following classes of officers: 1. Covenanted; 2. Uncovenanted; 3. Subordinate; 4. Native doctor. The covenanted medical officers belong all primarily to the military service, from which are supplied all the principal civil stations with surgeons. The European members of the uncovenanted branch have charge of the smaller civil stations; and the native are employed as subassistant-surgeons, in charge of jails and dispensaries. The members of the subordinate establishment are all military apothecaries; but some of them have of late been made honorary assistant-surgeons, and put in charge of civil medical duties. The Hindustani class native doctors are employed as trained medical assistants with native regiments, and the Bengali class in civil jails and dispensaries. A crisis has at length arrived when the interests of all these classes require to be seriously considered. The civil surgeon of the present day is no longer the only educated man in a Mofussil station; the subassistant-surgeon is very often as good, besides being his senior in years and experience; and in some places there are private practitioners and others in the employ of planters and zemindars, who are by no means willing to acknowledge his superiority. Under these altered circumstances, the future position of the covenanted medical service is a matter of great anxiety. Is the number of that service to be maintained at its former standard, so as not only to suffice for the army, but also for all the civil stations in the country? Is the Government to continue to provide medical officers at the public expense for its civil servants, when other practitioners are available at their private cost? Is the native army to have native or European medical officers? Are the subordinate medical officers to be mere apothecaries? Is the condition of the uncovenanted medical service to be improved? All these are questions difficult to solve; and their settlement involves more or less the interests of all classes of the profession. Then the highly educated Doctors of Medicine of the Indian universities are another growing element of disturbance. Will they be satisfied with the position of subassistant-surgeons? or are they to hold higher situations? Again,

the increasing demand for practitioners of the vernacular class makes it incumbent on Government to give them a better and more substantial education than they now receive; for, as in many cases they are the sole medical advisers in whom to trust out of the service, the public have a right to claim that they shall be properly educated. And when the native doctors are taken out of the same class, will they not too expect more pay, and to be allowed to perform duties of a higher description?

Most of these questions are, I believe, already under consideration, or soon will be, in connexion with the remodeling of the Bengal Medical Service; and it is to be hoped that such measures will be adopted as will fully satisfy the exigencies of the times.

To recapitulate the several matters I have already discussed, I may state—1. That, previously to the foundation of the Calcutta Medical College, the medical profession in Bengal was represented on the one hand by a vast number of irregular, unqualified, ignorant, and incompetent native practitioners, and on the other by the covenanted surgeons of Government; 2. That in the present day it comprises, besides the above classes, a large body of well qualified native medical men, some independent European practitioners, some unqualified medical students, a new class of quacks who prescribe European medicines without any professional knowledge, and certain followers of false systems of therapeutics; 3. That, to prevent deterioration in the ranks of the profession, as well as to advance its interests, the action of the Bengal Branch of the British Medical Association will be highly useful; 4. That, to protect the rights of legitimate medicine, the English Medical Act should be extended to India, or a new law enacted here by Government; 5. That, owing to causes easily understood, the relations of the different branches of the Government Medical Service are materially changed; and that a corresponding change is needed in their respective positions, to adapt them to the altered circumstances of the times.

With these few remarks, I beg to commend the interests of our profession to the most serious attention of Government; for, if the community at large suffer by our neglect, the Government itself has a still stronger reason to desire our welfare, if it be only to mark its enlightened appreciation of valuable services.

And now, apologising for its length, I will conclude this humble and ill-prepared address, thanking all my hearers for their patience and consideration in listening to it, and wishing the Bengal Branch of the British Medical Association a long and prosperous career.

#### EAST ANGLIAN BRANCH.

##### PRESIDENT'S ADDRESS.

By W. E. IMAGE, Esq., Bury St. Edmunds.

[Delivered at Bury St. Edmunds, June 17th, 1864.]

GENTLEMEN,—It gives me much pleasure to welcome you this day to the old town of Bury St. Edmunds; and I beg to thank you for the high honour you have conferred upon me by electing me your President for the ensuing year. I need scarcely say that, should any occasion occur during the period I have the honour to be your representative of the East Anglian Branch of the British Medical Association, my humble services will always be at your disposal. Before I proceed to offer any remarks to this meeting, I beg to propose a vote of thanks to Dr. Copeman, who is now retiring, for the many very useful services he has rendered the Association from its earliest dawn



to the present time; and particularly for the very useful monograph on apoplexy he gave the profession many years ago, which was one of the earliest pioneers to a more rational and scientific treatment of that disease. I think the opinions he then ventured to advocate, and, if I mistake not, in this town, are now received by us all as sound in pathology and conducive to successful treatment.

Our time is so limited, that I shall not venture to trouble you with a long address; but I feel there are a few subjects which I cannot quite pass over in silence.

At the suggestion of my colleague, Dr. Goodwin, our meeting has taken place within the walls of our remodeled and almost entirely rebuilt hospital; and I hope it will not be considered superfluous or out of place if I commence by making a few remarks on the Modern Construction of Hospitals.

When we first entered upon our duties as members of the Building Committee, we looked around for a model plan for our guidance in our undertaking. We soon discovered that hospital architecture, with reference to sanitary construction, had not long or profitably occupied the attention of architects or of the medical profession. On carefully examining the plans of our best hospitals, both provincial and metropolitan, we were constantly disappointed in our search after a model plan, embodying both convenience and the requirements of modern sanitary science.

The first point to be considered is site and sub-soil. The site in towns is frequently not a matter of choice; but, when it is, it should be selected on elevated ground, admitting of free ventilation; offering every capability of perfect drainage, away from the hospital itself; and not necessitating dead wells or other imperfect and dangerous systems of disposing of refuse matters. The drains themselves should be properly trapped, so as to prevent the reflux of noxious gases into the body of the hospital. Glazed terra cotta pipes, properly cemented, form the most secure drains. The drains, if possible, should not pass under the wards or any important part of the building. The soil should be sand, gravel, or chalk.

Next comes the construction of the hospital itself. The walls should be built of brick or stone, of sufficient thickness to prevent the alternation of heat and cold, and so placed as to allow free and perfect ventilation. The hospital should be divided into a male and a female side; the matron's apartments and female servants' being on the female side. The rooms appropriated for the medical staff, for the house-surgeon, the dispenser, the out-patients, etc., should be on the male side. The principal wards should stand well out from the body of the hospital, not approached through corridors, which become foul air flues. They should be each capable of holding sixteen or twenty patients; not too wide, but with space allowing fifteen hundred cubic feet of air to each patient. The ventilation should be, in my opinion, natural, obtained by opposite windows in the sides of the wards and open fireplaces. The floors should be constructed of oak, oiled and waxed to prevent absorption and the necessity of scrubbing. I must here remark, that the system or the necessity of scrubbing old deal floors, which have long been exposed to absorb noxious matters, is a plan fraught with great danger to the health of the patients, if allowed to remain in bed during the time when the floors are drying; for matters lying dormant are now set free by subsequent evaporation, and cause disease to the patients. We found erysipelas to be a very frequent consequence of washing the floors of our old hospital. The walls should be lined with Parian cement, which, when properly put on, offers a beautifully polished

and hard surface, incapable of absorption. When necessary, they may be cleaned with soap and water. The windows should be protected by linen blinds. The bedsteads should be of iron; the beds of straw or cocoa-nut. No curtains should be allowed to the beds, except in exceptional cases. At the distal end of the wards should be placed the lavatories, the latrines, and the bath-room. At the proximal end of the ward should be placed the nurse's room, with small windows into the ward for observation; the patients' clothes-room; the scullery; etc. There should be male and female separation-wards on their respective sides, placed at the top of the building, entirely cut off from the rest of the hospital, and admitting of perfect ventilation. There should also be male and female eye-wards, having a north aspect. In our eye-wards will be seen an ingenious and very useful blind, contrived by my colleague Mr. Newham.

The kitchens should be so contrived that the effluvia of cooking may be prevented from entering the body of the hospital. A separate ventilating shaft should be placed in the chimneys.

The out-patients' entrance and waiting-room should be on the male side, easily communicating with the physicians' and surgeons' rooms, and with the dispensary, from which a window should open into the waiting-room, to avoid the necessity of the out-patients re-entering the hospital after having been prescribed for by the medical officers.

A room of easy access should be provided for the reception of accidents, before admitting them into their proper wards; and a litter on wheels should be at hand, so as to remove the patients without causing any inconvenience, as well as to convey them to the lift into the operating-room, when required. The operating-room should be spacious and well lighted.

Hot and cold water should be supplied to every part of the building.

The laundry and washhouses, with hot-air chambers for drying the linen in damp weather, should be quite apart from the hospital.

The dead-house, etc., should also be apart from the building, and so placed as to be unobserved by the patients.

A bath-room, of easy access to the out-patients, should be provided.

Airing-grounds should be provided for the convalescing patients, of easy approach, and under the eye of the matron.

I will not prolong these remarks, which admit of such easy extension, as I only wished to give a general outline of what we found to be cardinal points in the re-construction of our hospital.

At the termination of this meeting, my colleagues and myself will have very great pleasure in showing you over our hospital; and we hope you will not think that our labours have been in vain.

The next subject which I shall briefly notice is the advent of a *British Pharmacopœia*, long and anxiously looked for by the whole profession. I confess myself, that, with all its shortcomings, I hail its publication as an event of great importance to our profession, as a great and bold advance in the right direction. Any event which tends to unite our members into one firm phalanx, must of necessity strengthen the hands of each individual member. That so great an event should have been accomplished without error, and to the entire satisfaction of us all; that so many difficulties should have been smoothed down, and, if I dare say, so many prejudices quite removed, by one first effort,—was not to be expected, as it was contrary to experience in either literary or scientific labour. After the criticisms of the press and the remarks of the learned President of the College of Phy-

sicians in London, there can be little doubt that the full intention of the Council will be deferred until a second edition of the *British Pharmacopœia* be presented to the profession, and a volume probably of less cost and more value be substituted for the present volume. Let us, therefore, be grateful to the learned men who have so laboriously and honestly toiled at this first effort to produce a *British Pharmacopœia*.

I cannot quite pass over a subject which is now very gravely occupying the attention of those members of our profession who are specially connected with our universities; viz., the present state of Medical Education. Our time is so limited, that I can only sketch in outline the points under consideration. A very excellent monograph on the subject has very recently been published by Professor Syme of Edinburgh, which, bearing the stamp of his extended experience and logical conciseness, deserves the highest attention; and I shall not scruple to avail myself of his labours in the following very brief remarks.

The vast increase of positive knowledge on all subjects which enter into the curriculum of the medical student, and the consequent over-taxing his memory in his attempt to master all in so very restricted a period, have loudly called for relief to his mind; and we find that, at the last meeting of the Medical Council, there was forwarded from England, Scotland, and Ireland, a strong expression of desire that the attention of licensing bodies should be directed to the evils which result from the present system of over-cramming.

It is found that the multiplicity of classes, the frequency of examinations, leave little or no time for practical study. Mr. Syme remarks that the second and third year's students have seldom more than an hour available for the dissecting-room, and that they no sooner put on their aprons than they have to wash their hands.

It is evident that there are only two sources from which relief can be obtained. These are: 1stly, the regulation of licensing bodies for the curriculum and examinations; and 2ndly, the conduct of the courses by the teachers. As no one mind can embrace the whole circle of medical science, it is obviously proper, in regulating for professional study, to provide for the acquisition of what is more essential for the purpose in view, and more especially for that part of it which can only be obtained during the period of education. Of these, hospital practice and anatomy surpass all others in importance.

Mr. Syme further observes that, whatever may be the inconvenience resulting from a redundancy of classes, it sinks into insignificance when compared with that which is caused by the present system of examinations. After thirty years' experience as an examiner he says: "I feel quite satisfied that these means of ascertaining the extent of qualification are productive of very little good and very great harm, since they afford no trustworthy criterion of real knowledge, and most seriously interfere with that concentration of mind requisite for obtaining a firm grasp of it. Nor has the system of giving prizes to students for special competence in any particular subject been attended with the success that was anticipated. In my student days it was almost unknown. Since that time it has been pushed to its fullest extent, and has certainly failed."

In the evidence given by Sir Benjamin Brodie before the Commissioners appointed to inquire into the regulations affecting the sanitary condition of the army, in answer to a question relative to giving prizes to medical students, he replied: "I have much doubt myself about giving competitive prizes in examina-

tions. It may work well in schools and colleges; but when you come to professional examinations (I do not speak about the Civil Service), I do not think that competitive prizes will answer; for, after all, they will be obtained chiefly by those who are crammed; by the men of good memories, and not by those who work. It seems to me that the man who thinks will not have the advantage that he ought to have. I would limit the prizes to one class, founded upon cases. I believe that the ordinary prizes do very little good. For some time past the teachers in the medical schools have been in the habit of giving prizes to students; yet, notwithstanding this, they are found to be not so well qualified for examination at the College of Surgeons as they were twenty years ago; and hospital surgeons and teachers are now satisfied that these prizes do no good; nay, more than that, that the best men do not get them. These prizes operate in this manner. A man wants a prize; he gets books; reads up the subject; and this kind of work keeps him out of the dissecting room and the wards of the hospital. Yet these are the only places he can get any knowledge that he can apply to practice, and learn to observe and think."

To remedy these evils of over-teaching and cramming, it is proposed:

That a preliminary examination in classics and mathematics, at least, should be peremptorily demanded before commencing a strictly professional course.

That eighteen years should be the earliest age to commence the study of medicine and surgery.

That necessary lectures should be given, but curtailed of much redundant matter.

That three or four years should be passed in study in some school or schools possessing a large hospital, with ample means for practical anatomy.

That the students' knowledge should be tested by examination founded upon medical and surgical cases.

That dissection and hospital practice should extend over the entire course of the term of study.

The learned Head Master of the Grammar School of the town, the Rev. Mr. Wratishaw, who has paid much attention to the subject of education, has kindly favoured us with his opinion on the question of a preliminary examination. He says: "It seems to me that the plan of allowing any preliminary examination to be passed during the professional course, must be perfectly fatal to professional education. All such preliminary attainments should be secured before professional education is allowed to be commenced; and I fully admit that professional education ought not to commence before eighteen in any profession or in the army. The grand remedy for the present chaotic state of things appears to me to be this. It is clear that the preliminary requirements for any liberal profession or for the army are identical. Let, therefore, the Universities of the several countries hold annual examinations embodying such preliminary requirements; and let all candidates for entrance into the liberal professions be required to pass one such examination before they are allowed to commence their professional studies. It is clear that the machinery for such examinations already exists in the middle class or non-gremial examinations of Oxford, Cambridge, and Durham, which would merely require trifling modification to suit the purpose. Should passing in a particular branch, e.g., Latin, be considered a *sine quâ non* in the medical profession, the rules of that profession ought to require Latin to be one of the subjects in which the candidate must pass."

I think I should not gracefully conclude these remarks, without thanking the learned and laborious Editor of the JOURNAL of our Association for the careful and clever hebdomadal he so punctually transmits



to our study tables. No one can now doubt the advantage of this publication to our profession. It gives an ample digest of all the current medical literature of the week, both foreign and British; and is of the greatest value to those of our brethren who are so fully engaged in their professional pursuits, as to lack the time requisite for obtaining so large an amount of professional information in any other way. The only request I have to make, is that he will avoid as much as possible breaking a lance so often with the other medical journals, as it does not redound to the honour of the Association.

## British Medical Journal.

SATURDAY, JULY 30TH, 1864.

### THE COURT OF EXAMINERS OF THE ROYAL COLLEGE OF SURGEONS.

OUR readers will have learnt by this time, that the essential evil in the management of the Royal College of Surgeons lies in the unconstitutional powers exercised by the Court of Examiners.

We have shown, that the Examiners virtually elect themselves into office—into an office of great honour, and of no inconsiderable value in a pecuniary point of view; and that, when they have attained office, they continue virtually to re-elect and keep themselves in office.

We shall now attempt to give our readers some kind of idea of what is the real value of an Examiner's office—the office which men strive so eagerly to obtain, and to which they cling so pertinaciously when they have obtained it—the office which has been hitherto, except in the one bright case of Sir Benjamin Brodie, invariably made a life-office, spite of the very express terms and intentions of the Charter.

We venture to affirm that, in the latter half of this nineteenth century, and under the force of modern reforming ideas, there is not to be found in this country, in operation at the present time, another instance of such management of affairs. We will not believe that any of what were the worst of our old corporate bodies can have brought home to them such a charge as that here brought against the Royal College of Surgeons. And let it be understood that, in the attempt which we now make to show the profession what is the value of an Examiner's office, we offer no opinion as to whether the office is under- or over-paid. Our only business, at the present time, is to show that the office, to obtain which men make such sacrifices, is really a post, not only of high honour, but also of considerable money value. And we wish to show this for the purpose of illustrating the position (which ought, in truth, to need no illustration), that no man ought to have the power of electing, or of assisting to elect, himself into an office of honour and of money value.

In putting, then, the Court of Examiners of the Royal College of Surgeons to the test of an examination, we must remark that, in some respects, our inquiry must of necessity be a partial one. The elements required for a complete investigation are not at the disposal of the profession. Sydney Smith said that, despite all commissioners' inquiries, only one man in the country knew what the income of the Bishop of London was, and that man was the Bishop himself. Just so, we must remark, respecting the salaries of the Examiners. The Examiners alone know what they receive in the money way. Mr. Guthrie, some thirty years ago, before a Committee of the House of Commons, put the figure at about £300 *per annum*. But the feast is, we conclude, a moveable one, varying from year to year in accordance with the number of the candidates; it is, in fact, a head- or poll-tax. Whether the fee per head has increased or diminished since Mr. Guthrie's day, we know not. All we do know is, that the subject is involved in much obscurity; and that the Court of Examiners, which receives the fees for examining, is all-powerful in the Council that fixes the fees which they shall receive for examining.

If, in their annual balance-sheet, the Council would give the sum received by the Court, we could ourselves easily divide that sum by ten, and so procure the at present unknown quantity—the  $x$  which represents an Examiner's salary; but this the Council—for reasons which to them may seem sufficient, but which to us look very obscure—have not hitherto done. Should any curious mind, like our own, seek information on this score from the College balance-sheet, he will have to work his conclusions out of the following proposition: If the "College Department, including Council, Court of Examiners, Dental Board, Midwifery Board, auditors, fellowship, diploma-stamps, list of members, salaries, wages, coals, law expenses, etc., cost £8831:15 *per annum*", what does one Examiner cost?

A senior wrangler would, we fancy, be puzzled to get much out of this; at all events, the question is quite beyond our powers to answer.

This fact, however, we can note, that (in the accounts of the year 1860 to 1861, which accidentally lie before us), out of a sum of about £12,000 taken in fees from candidates, £8831:15 are expended as above; and that of the whole receipts—viz., £13,894:10:4—there were expended £13,581:14:1.

Having, therefore, no facts by which to state correctly an Examiner's annual income, we can only make a guess at it; and from the best information we can obtain, we shall put it at an average of say £400 a year; and we believe that we are not overstepping the actual sum.

This, then, together with the honour attaching to the office of Examiner, is the prize to obtain which men seek to enter the Council; towards which, when

in Council, they so anxiously and persistently turn their eyes; and to which, as Examiners, they hold so adhesively and struggle for so unrelentingly. Of this, at all events, we may be very sure, the prize is not a small one, for the obtaining of which men set at nought the direct injunctions of their charters, and so boldly brave the criticisms of a righteous professional disapproval. But why should there be contentment? Why should the Examiners be, we will not say ashamed, but shy, to tell what fees they yearly take?

We have heard men who enjoy, and have long enjoyed, the sweets and honours of the office, indignantly exclaim, that the profession have no right to know or to ask anything about the matter. The members of the College, they say, have their diploma for their money paid; they have their *quid* for their *quo*; let them rest and be thankful, attend to their private business, and leave us to manage our own affairs—*i. e.*, the affairs of the College. But this sort of argument, which is clearly the reasoning of the old corporate days, is not one which will satisfy the profession at this time of day. The member is part of the College, and has as good a right to know whither his money goes, as the Council and Court of Examiners have to spend it.

Obscurity at present, then, rests over the College accounts; but no such great obscurity rests over the constitution of the Court of Examiners itself. Let us, therefore, examine this Court, and mark its composition, and see if it be what the Charter meant it should be. The present Examiners are, Mr. Lawrence, Mr. South, Mr. Arnott, Mr. Luke, Mr. Cæsar Hawkins, Mr. Skey, Mr. Hodgson, Mr. Wormald, Mr. Kiernan, and Mr. Partridge.

Mr. Lawrence holds office for life, and he holds this under the Charter of 1843; all men who were Examiners when that Charter was obtained being permitted to hold office for life.

When the Charter of 1852 was obtained, Mr. South, Mr. Arnott, Mr. Luke, and Mr. Cæsar Hawkins were in actual office; and to them, therefore, was given a bonus—that of holding office at the pleasure of the Council. One of the main objects of this Charter of 1852 was to prevent men holding office for life; and it was notoriously a great source of grief to Sir Benjamin Brodie that its plain meaning was nevertheless evaded by the Council; holding office at the pleasure of the Council having been up to the present time invariably interpreted by the Council as meaning for life. By this Charter of 1852, all Examiners elected subsequently to that year retire at the end of five years, but are eligible for re-election; and, in the teeth of the very sense and purport of the Charter, have been up to this time invariably re-elected.

There are, therefore, three classes of Examiners:

1. Those who hold office for life, having been in

office before the Charter of 1843. Of this class, Mr. Lawrence is the sole remaining representative.

2. We have Examiners who hold office at the pleasure of the Council—those who were in office before the Charter of 1852; viz., Mr. South, Mr. Arnott, Mr. Cæsar Hawkins, and Mr. Luke.

3. We have Examiners who hold office under the Charter of 1852, and are elected quinquennially; viz., Mr. Skey, Mr. Hodgson, Mr. Wormald, Mr. Kiernan, and Mr. Partridge.

Now, let it be clearly understood, that the main end and object of these Charters and changes were to prevent men from holding office for life, either in the Council or in the Court of Examiners. And let it be further clearly understood, that the indictment we lay against the Council is, that up to the present moment they have done their very best to evade the meaning of the Charter; and that, in the case of the Court of Examiners, they have hitherto done it effectually. Living under the *regime* of reforming Charters, they have maintained, and clearly in their own favour, the abuses which those Charters were meant to remove. That they have the power to do their duty—*i. e.*, to obey the intentions of the Charter—is obvious. All the Examiners, with the exception of Mr. Lawrence, are in the hands of the Council. Four hold office at the pleasure of the Council; and the other five must be re-elected at the end of their fifth year of office, if they again enter the Court. The Council, then, have power enough, if they only have the will, to do their duty; and soon will come an occasion for them to exercise their power. One or two of these gentlemen—Mr. Skey and Mr. Hodgson—will in a short time have completed the second of their quinquennial periods of examinership; and, according to the routine of the Court, will present themselves for re-election—*i. e.*, for a third quinquennial period of office. Here, then, is an occasion to put to the test the principles of those gentlemen who have been of late years elected into the Council on reforming principles. Will those gentlemen perform their bounden, their plain and manifest duty? Will they boldly stand by the Charter? or, as others have yet ever done before them, will they be silent, and once again look on in peace while the Court of Examiners (through the Council) re-elect themselves to office, and so perpetuate the scandal of virtually making the examinership a life-office, and of laughing to scorn the Charter of 1852, which was obtained by Sir Benjamin Brodie for the express purpose of doing away with the life-system?

The next election of Examiners will put to the test the sincerity and power of the reforming spirit which is awakened within the College. Let the Fellows, therefore, carefully watch this election, and steadfastly adhere to the practice of re-electing no man to the Council until the principles of the Charters of the College are practically carried into action.



## THE INDIAN MEDICAL SERVICE.

The defeat of Sir C. Wood's attempt to do away with the competitive examination in the Indian Army Medical Service is a great victory; for which the profession is chiefly indebted to the energy of Mr. Hennessy. Had the attempt succeeded, competitive examination in Her Majesty's Army Medical Service would have soon gone to the wall. Both the Commander-in-Chief and the Director-General plainly told the medical deputations which waited on them, that they did not like these examinations, because they stood in the way of their obtaining a due supply of medical men for the army. The Director-General distinctly said, that the third class men of Netley were quite good enough for the army; that he did not expect first class men would enter into the army,

We much regret that some member did not expose the fact of the practical swamping of the competitive examination now going on in the Queen's army. "All the assistant-surgeons entered the Queen's army by competition", said Sir C. Wood. Now, without accusing him of Jesuitry, the real facts, if they had been stated in the House, would have shown that the statement was virtually untrue. Sir C. Wood ought to have known that the Director-General has advertised for, and has actually obtained offers of service from, three hundred medical men of all ages, from whom no word of examination is required.

The Director-General cannot get men of ability to go into the army through competitive examination, simply and solely because of the unfair treatment to which they are subjected in the army. Instead of improving the condition of the army medical officer, an attempt is made to swamp the high class men altogether by advertising for the waifs and strays of the profession. Sir C. Wood ought, also, to have known that a number of these army surgeons by advertisement are actually now doing service in the army. These gentlemen do not, it is true, become assistant-surgeons, but they do all the work of assistant-surgeons, and occupy the places of assistant-surgeons; and, therefore, the health of the army is committed to the charge of gentlemen who have failed in obtaining employment elsewhere, and are above the age, or unable to face the competitive examination. Hence, it is a positive fact that, by the dodge of introducing these *acting assistant-surgeons* (as they are called) into the army, the benefits and safeguards of competitive examination have been actually done away with. To say, therefore, that the medical men who have charge of the health of the Queen's army, at this moment, are all men who have proved their competency by competitive examination, is to say what is absolutely untrue.

From the spirit with which this subject was treated in the House of Commons, we are satisfied that, if justice to the army medical officer be not voluntarily

done by the Horse Guards and the War Office, those abodes of lasting red-tapeism will at the next session of Parliament be forced to do the justice they now refuse. The voice of Parliament is manifestly with the army medical officer, and as manifestly dead against the "system" of the Commander-in-Chief and the Director-General.

THE ROYAL COLLEGE OF PHYSICIANS AND THE *AD EUNDEM* DIPLOMA.

WE have authority for stating that the Council of the Royal College of Physicians, to whom the several memorials on this question were referred, has resolved to advise the College not to grant the *ad eundem* diploma of Licentiate.

The reasons are obvious. Medical corporations have not the same standard of requirements, whether we regard the period to be passed in professional study, or the nature of the examinations to be undergone by candidates for their diplomas; and, as the College instituted the present order of Licentiates with a view to create a class of practitioners whose education, both general and professional, should be more in accordance with the position they were intended to take, it would detract from the value of the licence, and be an act of injustice to the present Licentiates, if the College admitted to the same status others whose sufficiency had not been tested by its own Examining Board. The Licentiates of the College, moreover, are legally physicians; and, as such, are entitled to practise surgery and midwifery, as well as medicine; the expression "*ad eundem*", as used by the memorialists, is, therefore, inapplicable. They have, however, no reason to complain. The College, when its present by-laws were passed, foresaw the probability that persons already in practice might desire to obtain the status of Licentiate; and, recognising the right of every one to obtain that status who could satisfy the College of his proficiency in the science and practice of medicine, surgery, and midwifery, it provided that such persons should have the licence granted to them, on passing a *vivâ voce* and purely practical examination on those subjects. We commend this view of the question to the consideration of the memorialists; for it is evidently the only way in which, in the opinion of the Council, the licence can be satisfactorily obtained by them and given by the College.

THE Select Committee of Education of the General Council have sent to the different licensing bodies copies of a Report on Medical Education, and request opinions and comments thereon. This seems to us to be another part of the farce which the Medical Council has been playing for the last two years at least. The Select Committee of the Medical

Council and the Medical Council know the opinions of each licensing board on the subject of medical education, as well as the licensing boards know themselves. The Medical Council is, in fact, composed of representatives of the licensing boards. If the Medical Council—the selected quintessence of all the educatory medical knowledge of the country, the Council of Medical Education *par excellence*—is unable of its own wisdom to frame a system of education, it had better at once abdicate its office. The truth is, the Medical Council is radically defective—we may say constitutionally weak. It is wanting in moral courage and moral force; and its operations, like those of all bodies so constituted, as long as it exhibits these characteristics, will be necessarily failures. This last move of the Council looks very like another attempt to shelve the great question of medical education. How not to do it, is becoming the motto of the Council. Every Licensing Board will send them different opinions; and the Council will then seize upon the occasion to conclude that nothing can be done, because the different Boards are so strongly at variance. We hope we may prophecy wrongly.

WE have been requested to publish the following letter, by the chairman of the Committee appointed at the Bristol Meeting to consider the desirability of establishing a Provident Fund in connection with the Association.

*To the Members of the British Medical Association.*

FELLOW ASSOCIATES,—I beg specially to call your attention to the fact, that the Report of the Medical Provident Fund Committee will be read at the Cambridge Meeting on Friday morning next.

The Report will, I hope, show demonstratively that a Provident Fund, capable of exercising the most useful influence in the profession, may be easily worked in connection with the Association; and it will further incidentally suggest the question, whether it would not be advisable to obtain for the Association a Royal Charter of Incorporation.

Under these circumstances, it may be fairly assumed that the discussion on the Report will be the leading feature of the meeting at Cambridge; and that, on the decision of the meeting, results of immense moment in our future will rest.

May I, therefore, urge on all members of the Association who may come to Cambridge, to let nothing hold them from their attendance on Friday morning; and may I also ask members who are in doubt about coming, to treat, for once, "their doubts as traitors," and to join their brethren.

I remain, fellow associates,

Your faithful friend,

B. W. RICHARDSON.

12, Hinde Street, W., July 28th, 1864.

ONE subject of especial interest will be brought under the notice of the Association at the Cambridge meeting; viz., that of medical education, introduced by Professor Christison; and in that, so high a seat of learning and centre of education, it cannot fail to elicit a very interesting discussion. We venture, therefore, to remind the associates that the discussion

will take place on Friday, after the reading of the Report on the Medical Provident Fund.

In accordance with a suggestion thrown out in our last number, we understand that it is the intention of some of the Fellows of the Royal College of Surgeons, at the meeting of the Association at Cambridge, to meet together for the purpose of discussing the question of country representatives in the Council of the College. We have no doubt that the Fellows of the College present will gladly avail themselves of the opportunity of conferring thereon.

M. Guyon has lately studied what has been called the bloody sweat. He concludes, as most modern pathologists have, that blood-sweat is nothing more than true hæmorrhage from broken surfaces.

M. Trousseau, speaking of the treatment of acute rheumatism, says: "There are two opposed parties in Paris; one may be called the bleeders, and the other the quininists. Those who use the lancet assert that the quinine produces the attacks of cerebral rheumatism; and those who give quinine accuse the bleeding of producing it. Few physicians, however, bleed now-a-days. Out of fifty hospital physicians in Paris, not more than four use the lancet in acute rheumatism, whilst the forty-six give quinine. M. Beau and M. Briquet, who give quinine, assert that bleeding is most dangerous; but they, of course, are contradicted by the bleeders. Out of more than sixty cases of cerebral rheumatism of which we have the history, we find seven or eight deaths in cases which have been bled in the orthodox manner; and in others also, which have only been bled two or three times, and cupped occasionally. Of those who died either with or in spite of the quinine, some took only a small quantity, some took a larger amount, and some large doses of it. The patient of whom we are now speaking was neither bled nor took quinine, and yet she recovered. The most rational treatment of cerebral rheumatism seems to be to try to reach the articular inflammation by blisters, etc. Three patients we cured with musk and opium. In other cases, these remedies did not succeed; and then we have had two cases which recovered without the employment of any active remedy."

"Had I been a diplomatist doctor," says Brillat-Savarin, "I should write a good monograph on obesity, and should have then confined myself to that line of practice. In this way I should have had the double advantage of gaining for my patients those who were in excellent health, and should have been besieged by the most beautiful half of humanity."

One Ménard, "doctor, oculist, dentist, etc.," has been fined in a French court 2,000 francs, costs, and fifteen months' imprisonment.



# CAMBRIDGE: ITS UNIVERSITY AND ITS COLLEGES.

THE following sketch of the Town, University, and Colleges of Cambridge, is offered to the members of the Association, in the hope of imparting additional interest to the approaching Annual Meeting, as well as of diffusing information respecting the University and Colleges; which, though closely resembling the University and Colleges of Oxford, are unlike any other institutions in the world, and are really very little understood, except by those who have been educated in them.

Their history is so interwoven with much that is interesting in the history of our people and the habits of former times, that I have been led somewhat more into detail than I intended. Further information may be sought in the *New Cambridge Guide*, which visitors will do well to purchase, in the *Student's Guide to the University of Cambridge*, and the *Cambridge Year-Book*, in Fuller's *History of the University of Cambridge*, in Cooper's *Annals of Cambridge*, and his *Memorials of Cambridge*, from all of which I have derived much, and which I have not scrupled freely to quote.

Cambridge, July 1st, 1864.

G. M. HUMPHRY.

## The Town.

CAMBRIDGE, containing a population of between 26,000 and 27,000, is situated in a large plain which, towards the north-east—that is, in the direction of the river—is continued, with but little alteration of level, to the sea, the chief break being caused by the high ground of the Isle of Ely. In other directions, the plain is skirted by low ranges of hills. Two offsets, or spurs, from these—the Gog-Magog Hills on the south, and the Castle Hill on the north—approach the town. The latter, indeed, runs into the town, and is near the river. The Gog-Magogs are about three miles distant.

The Mound upon the Castle Hill, on the north of the town, is the “foundation-stone” of the place. Its base, composed of chalk, is natural. Its upper part is artificial, and is attributed to British hands. It was probably not for sepulchral purposes, but as a look-out or place of defence, like the great mound at Marlborough and, perhaps, also, Silbury Hill, near Marlborough, which is the largest of the kind, and which is said to be altogether artificial. Enduring “still in defiance of the teeth of time, as the most greedy glutton must leave those bones, not for manners, but necessity, which are too hard for him to devour”, the Castle Mound gives a good view of the surrounding country, including the Isle and Cathedral of Ely; and from its base are seen running out, towards the north and east, two bastions, with a curtain between them, erected for the cannon of Cromwell.\*

The high ground on the north of Cambridge, prolonged into the tongue upon which this mound stands, slopes agreeably to the river, facing the south and sheltered from the north, furnishing an attractive site, under the name of “Cair-Graunth”, for the residence of the primitive architects of the mound; and on the opposite, or southern side of the river, a slightly raised ridge of gravel led, through the

marshy valley, to the Gog-Magog slope. The river was, therefore, approachable here in both directions; whereas, for several miles, above and below, were marsh and morass on one or both sides of it. Here, accordingly, was a ford, and subsequently a bridge, as indicated by the successive names “Camboritum” (*Rhyd*, the Celtic for “a ford”), and the Saxon “Grantabrycege” or “Cantabrycege”.

The same natural advantages attracted the ROMANS, who took possession of the ford, and occupied the mound and the sloping ground between it and the river. The boundary lines of their station are, at parts, still traceable; and many coins and other of theiravings have from time to time been found.\* Two of their great highways crossed here. One—since called the “Akeman Street”—from the coast of Norfolk, near Lynn, ran through Ely to Cambridge, then, through Barton to Cirencester and Bath. The other—so called “Via Devana”—from Chester and Huntingdon, through Cambridge, over the Gog-Magog Hills, to Colchester. The Huntingdon Road, Bridge Street, and Sidney Street, are nearly on the line of the latter road; its course may be traced to the Gog-Magogs, and it forms a Broadway running for some miles beyond them.

Rough handling followed the departure of the Romans; the great pillagers of the period having found their way here and, I suppose, established themselves at Denny (DANE'S Island), nearly half way to Ely. The rich pasture lands and well made arches built into the farm-house of “Denny Abbey” tell of the better habits, intelligence, and skill of their Norman successors. Still, in the time of the SAXONS, Grantabrycege must have been a place of some size and importance; for there was a royal mint here in the reign of Ethelred II, the coin being distinguished by the word “Grant.”; and the town extended to a considerable distance on the south side of the river,

\* Cambridge was for some time held by the parliamentary forces, who were very obnoxious to the members of the University, though the town favoured them, and elected Cromwell high steward. He was also made a freeman of the town, and represented it in both the parliaments of 1643. They committed their usual depredations in churches and chapels, turning King's College Chapel into a drilling place, etc.

\* The raised part leading up to, and turning the corner by, Storey's almshouses, is on the site of the Roman wall, and the ditch, following it, was the ditch. The southern wall was close by St. Giles' Church, and forms the terrace in the grounds of Magdalene College. The remains of a wooden causeway on the south side of the river, under Bridge Street, were found in making the sewer some years ago. See paper by C. C. Babington, in *Publications of Cambridge Antiquarian Society*, No. iii.

judging from the situation of St. Benedict's Church, the tower of which is one of the best specimens of Saxon architecture in the country, and the wall of which at the east end of the nave is also Saxon.\* Moreover, there existed, at this time, a fraternity, or "gild", the members of which were bound to assist one another to avenge, by fine or otherwise, the injury, insult, or murder of any of their body. This and other similar combinations, among our Saxon ancestors and other northern nations, for mutual protection and assistance in various ways, in those lawless times, were, to some extent, religious societies, being cemented by oaths and services observed in certain churches; and it is not improbable that St. Benedict's Church was built by, or by the aid of, this gild. At any rate, we find, in the reign of Edward III., "the Guild keeping their prayers in St. Benedict's Church", and the "Guild of the Blessed Virgin observing their offices in St. Mary's Church", uniting to found the College of Corpus Christi.†

The only other Saxon remnant in the place is, I believe, the chancel arch in St. Giles' Church, which is considered to be of earlier date than St. Benedict's tower, and is an example of a chancel arch alone remaining, while the nave and chancel have been rebuilt.

The NORMANS built a castle on and around the "mound", the keep being, probably, on the flat top of the mound; and the Conqueror conducted his military operations from it, against the Saxon prelates and nobles who, with Hereward and his army, long held their "camp of refuge" against the Norman, and would have continued to do so had not some discontented monks enabled him to surprise the garrison. The castle has altogether disappeared, less under the influence of war or time than under the rude hands of those who coveted its stone and timber for other purposes.‡

The value of stone here, and the consequent sparing use of it, are illustrated by the fact that the old building on the north of the river, near St. John's College, commonly called "Pythagoras School", is named in ancient records "the stone house", showing there to have been no other of that material. It was a Norman manor-house on the Merton estate, and, till lately, a good specimen of its kind, consisting of a ground floor, vaulted, for cattle (like the present farm-houses on many parts of the continent), and a first floor, with one large hall for meals, servants, etc., and two private chambers for the head of the house and his family. This house, with the surrounding Merton estate, was conveyed to Merton College, Oxford, by the founder, and still belongs to that society.§

\* It is a square tower, showing the peculiar Saxon quoining, with long and short projecting stone-work at the corners, and horizontal stone courses dividing it into tiers. The heavy windows have a double arch cut in one large block of stone, with a rude balustrade, or stone column, dividing each into two, and situated nearer the inner than the outer side of the wall. The arch from the tower into the church, seen by ascending the gallery, is a large semicircular arch with certain curious rude animals in the place of drip supporters. This church is of great interest to the antiquarian, and will well repay a visit to the interior of the tower, as well as to the rest of the structure.

† The latter Gild is said to have had its hall opposite St. Mary's Church, where the Senate House now stands. (See account of these Gilds in Cooper's *Memorials of Cambridge*, i, 140.)

‡ Queen Mary is said to have given the stones to Sir John Huddleston to build his house at Sawston, seven miles from Cambridge.

§ This was the dwelling house of Merton, founder of the College of that name in Oxford. Whence it had its name is uncertain; whether a society of gentlemen might not have met here or lived here in a Pythagorean manner, not unlike a college life; or whether the mathematics, morals, or other philosophy of Pythagoras might not have been held or taught here in opposition to the general philosophy of those times, is rather to be taken as probable conjecture than to be admitted as certain."

In the reign of Henry I, Pain Peverell, standard-bearer in the Holy Land to Robert, Duke of Normandy, built the priory house at Barnwell, close to Cambridge, and removed to it the canons of St. Giles, increasing their endowments. The name "Barnwell" is from a small well, which was doubtless an object of superstitious reverence among the Britons or Saxons, who, at certain periods, met and celebrated games there. It meant either children's well, or the well of champions in the games.\* Till recently, the water of this well continued to bubble up near two elm trees at the back of the present "Barnwell abbey house"; but a sewer, carried close by, has diverted the stream and left the ground dry and bare. The priory was surrendered to Henry VIII, and granted by him to Sir Anthony Browne. There remain a part of the chapter-house of the priory, a chapel (now a church; the chief church of the priory has been destroyed), a few walls and traces of the fish-ponds.

It is supposed that the same Peverell built the "round church of St. Sepulchre"; the form having been suggested by that of the Church of the Holy Sepulchre at Jerusalem, or of other Eastern churches. It is the oldest of the four round churches in this country. The three others are, that of St. Sepulchre at Northampton; the Temple Church in London; and that of St. John at Little Maplestead in Essex. It was restored and added to about thirty years ago. Its stone altar, then erected, was the subject of a celebrated trial in the Court of Arches; and, in consequence of the judgment of Sir H. Jenner Fust, had to give way to a wooden table. In the neighbourhood of this church was the "Jewry", inhabited by Jews brought from Normandy by the Conqueror. "Here", says Fuller, "their carriage was very civil; not being complained of, as elsewhere, for crucifying children and other enormities." They quitted Cambridge about two hundred years afterwards.

About a quarter of a mile beyond Barnwell Abbey, at Sturbridge, close to the railway-bridge, is a small Norman structure, the chapel of a Leper Hospital, built, as such houses commonly were, outside the town and precincts of the monastery. It was dedicated to St. Mary Magdalene. King John granted to this hospital a fair, from which the celebrated Sturbridge Fair, formerly the most flourishing mart in the kingdom, in all probability, originated. He "also granted to the Prior and Canons of Barnwell a fair there, now called Midsummer Fair, which is said to have originated from the resort of children and young persons thither yearly on Midsummer-eve, to amuse themselves with wrestling matches." (Cooper.)

The proceeds of tolls, etc., from fairs were, in those days, a considerable source of revenue and we find that King Stephen granted to the nuns of St. Rhadegund a fair, on the vigil and feast of the Assumption of the Virgin Mary, which continued to the present century. This nunnery was founded about 1133, and enlarged by Malcolm IV, King of Scotland and Earl of Cambridge; but was dissolved, in the time of Henry VII, in consequence of the incontinence of its inmates, when Jesus College was founded upon its site, and endowed with its possessions.†

There were various other religious houses in Cambridge; the number of them being probably related,

\* *Bearn* is the Saxon for a child. *Bearn* for a champion, prince, or hero. *Wyl* is a well.

† "This Rhadegund daughter to Berthram, Prince of Thuringia, was wife to Lotharius, King of France (son to Clodoveus the Great, the first Christian king of that country), who, sequestering herself from her husband's company, about the year 560, lived and died in a small monastery in Poictou, thereby gaining the reputation of a saint. But it seems the sisters living in Cambridge nunnery fell as far short in chastity as she overdid therein." (Fuller.)



either as cause or effect, to the existence of the University in this place; and, as in the case of the Rhadegund Nunnery, some of them were converted into Colleges; others were dissolved.\*

A charter was granted to the town by Henry I. intended to secure to it a monopoly of the trade of the county and to provide domestic judicature. The charter was renewed by, or rather its renewal was purchased of, the succeeding sovereigns; and the burgesses had a common hall at an early period. A large room and other buildings, parts of an extensive new plan, have recently been erected; for which we are mainly indebted to the exertions of R. M. Fawcett, M.D.

Henry III seems to have taken much interest in the town as well as the University. He began to fortify it against the depredations of the surrounding barons, and made a ditch on the south and east sides, called the "King's ditch", which ran from the river, parallel with, but a little to the outside of, Bridge Street and Sidney Street, crossing the latter near Christ's College, where was a gate leading to Barnwell. It then ran in front of the new museums, along Pembroke Street, but seems not to have been completed to the river. There was, however, another gate in Trumpington Street, called "Trumpington Gate". The ditch has long been covered over and converted into a sewer.

Cambridge was never a very flourishing place, there not being much manufacture or commerce, and, consequently, not many wealthy inhabitants or good houses. A few old houses, built of wood, remain in Bridge Street, Trinity Street, and the Petty Cury.† The Falcon, in the Petty Cury, was a considerable inn; in 1504, it was given to the Priory of Barnwell; it is now divided into small tenements, but retains the court and galleries of the old inn. The house next King's College, belonging to Mr. Cory, was the White Horse, where the Reformers met; hence it was nicknamed "Germany House"; and in one of its rooms (since pulled down to make the thoroughfare into King's Lane), Tindall and Coverdale used to work at their translation of the Bible.§ At the Three Crowns, in Silver Street, Queen Elizabeth is said to have rested, after riding on horseback from Haslingfield, where she slept at Mr. Worthington's house. Near this, in Foster's Lane, were the stables in which Hobson's|| choice was given.

Jeremy Taylor was a native of the place; and the learned, pious, and eloquent Robert Hall officiated, from 1790 to 1806, to a congregation of Protestant dissenters, previously to his removal to Bristol, where

he died. A licence was granted to this congregation by Charles II.

Though not much above the level of the sea, and, therefore, deficient in the bracing influences which belong to the atmosphere at elevated parts, the town of Cambridge has not the disadvantage of being in a hollow or basin, but is on a nearly flat surface or plain; and though the atmosphere is rather moister, and perhaps more foggy, than at some other parts of the country, yet the rainfall is comparatively small (about twenty inches in the year), and the ground, of porous gravelly nature, permits the wet quickly to drain away, so that the surface is very dry. The drainage, artificial as well as natural, is good; and the place is by no means unhealthy. It has enjoyed a remarkable exemption from serious epidemics for many years. Neither cholera nor diphtheria ever established themselves here; fever is not common; and the visitations of scarlet fever, measles, etc., are less severe than in most other places. Diseases are not, for the most part, of an acute type; and ague has been almost exterminated by the drainage of the surrounding districts.

ADDENBROOKE'S HOSPITAL, founded, by the will of Dr. John Addenbrooke of St. Catherine's Hall, in 1719, was insufficient for its purpose and ill-constructed. It has lately, therefore, been almost pulled down, and is in process of re-erection. It will be an extensive, commodious building, with spacious wards having windows in both sides, convalescent-rooms, etc. The accommodation for out-patients, other offices, and one ward, will be on the ground floor; wards for medical patients will be on the first floor; and, above, will be the surgical wards and operating-room.

### The University.

An "university", according to the original meaning of the term, is the combination of a number of persons into one body or whole; in the middle ages it was equivalent to the word "corporation", and was not restricted to scientific bodies; thus, there were universities of tailors.

The wish and, therefore, the attempt have not been wanting to connect the western universities with the schools of olden time, with those of Alexandria and Athens, and even with the "schools of the prophets". In the case of the University of Cambridge, accordingly, the legend runs, that it owes its origin to Cantaber, a Spanish prince, who is said to have built a town on the River Cante, about the commencement of the Christian era, and to have brought philosophers and astronomers from Athens, among whom were Anaximander and Anaxagoras; and, by a bold stretch of antiquarian imagination, the rabbit-skin hood of our Bachelors of Arts has been compared with, and deduced from, the camel-hair mantle of the Prophets. These and the like strainings into pre-historic gloom may serve to give range to fancy, and form a fabulous background for history.

History, however, tells us that there was little public teaching of any kind in the western part of Europe, till centuries after Christ. In the time of the great Emperor of the West and patron of the learned, Charlemagne, schools were attached to cathedral and ecclesiastical establishments for the education of such of the laity as chose to resort to them, as well as for the clergy; and, in the twelfth century, the impulse given to learning by the commingling of men consequent on the Crusades, and by the presence of Arabians in Europe, attracted greater numbers to these schools, and soon led to the formation of bodies of teachers and scholars, in some measure independent of ecclesiastical influence. For mutual aid and protection, these teachers and scholars formed them-

\* Each of the four orders of Mendicant Friars had an establishment in Cambridge: the Carmelites (white friars, first at Chesterton, then at Newbarn, afterwards between Queen's and King's Colleges; the Augustines (Austin friars), near the site of the new museums; the Dominicans (black friars), on the site of Emmanuel College; the Franciscans (grey friars), on the site of Sidney College. The White Canons are supposed to have had a house on the site occupied by Addenbrooke's Hospital.

† Gloves were made at Cambridge. Queen Elizabeth, on her visit to the University, was presented with a pair of Cambridge gloves; and the proctors used to present a pair of gloves to each of the disputants in the schools for degrees.

‡ "Petty cury", or the "little cookery", *cury* being an ancient term for cookery, from *curare*. It has been suggested that the "great cookery" was part of what is now the market-place. Petty Cury has also been supposed to be derived from *Petite Ecurie*.

§ The "Bull" Hotel, close by, is on the site of the "Black Bull", which was in existence in the reign of Edward IV.

|| Hobson was a carrier and horse-leter in the time of James I. The bringing the water from nine wells at Shelford, through the town, to the Conduit in the market-place, has been attributed to his liberality; but, apparently, not quite correctly. He is said to have been the first who undertook the business of horse-letting in England; and the scrupulous pertinacity with which he refused to allow any horse to be taken from his stable, except in its proper turn, gave rise to the well known proverb of "Hobson's choice".

selves, according to the custom of those times, into associations, or corporations, or "universities", electing a superior, who was called the rector or "chancellor"; and they sought and acquired certain privileges from the sovereigns, who were usually willing to extend their patronage to them. At first, any one might assume the office of teacher in these universities; but it was soon found necessary to restrict this power to those who showed themselves competent for the work, and who were, accordingly, admitted to the degree of "doctor" or "master".\* Assistants were added, who were called "bachelors", probably from the "knight bachelor" (*chevalier bachelier*), or humbler species of knight, that term being used in contradistinction to the "knight banneret", who had a right to unfold his banner, and who brought followers to fight under it.

Thus, those seats of learning came to be regarded as universities in which degrees were given. They were not altogether removed from clerical influence. The chancellor of the church was sometimes the chancellor of the university, or the latter was appointed by, or derived the confirmation of his powers from, the bishop of the diocese; and though the authority of the monarch might be sufficient licence for the doctors to teach in his own dominions, the authority of a papal bull was necessary to enable them to teach in other parts.† The power of the church over the universities was, however, often a subject of contention.

It will be understood, therefore, that the universities were not founded by particular monarchs or other influential persons; but grew up spontaneously under the necessities of the times, like the guilds and other similar associations. As they grew up, they acquired the patronage and assistance of the respective sovereigns, and fell more or less under the influence of the church; but they did not owe their origin either to the sovereign or the church.

The subjects of study were arts or sciences, including logic, rhetoric, grammar, and mathematics; and these, after a time, were regarded as preparatory to the other subjects—viz., theology, law, and medicine. Each of these, as well as arts, was called a *faculty*;‡ and there were thus usually four faculties in an university—viz., "Arts", "Theology", "Law", and "Medicine"; though one or other may have predominated. Thus, the faculty of Arts was most conspicuous in Paris, that of Law in Bologna, that of Medicine in Salerno.

The constitution of all the earlier universities was very much alike; partly because similar social necessities led to similar organisations; partly because any advance in the manners, or innovation in the customs, of one place, seems to have spread to the neighbouring countries as quickly as it does now, or even more quickly, and to have been adopted with less alteration.

\* The appellations "master" and "doctor" were at first used synonymously, corresponding with "professor"; and in process of time the name "master" came to be restricted to the teachers of the liberal arts, and the title of "doctor" to be assumed, as a distinction, by the teachers of theology, law, and medicine. "Master" was a general title; "doctor" a special. A degree was therefore originally a licence to teach. Subsequently, the teaching by masters and doctors was supplanted by the establishment of public salaried professorships; and that has continued to be the case in most of the European universities. In Oxford and Cambridge, however, the teaching in arts has long been, almost exclusively, conducted, not by professors, but by Bachelors and Masters of Arts, appointed by the colleges or assuming the work of their own accord as private tutors.

† It has been supposed that this power of qualifying teachers for all parts constituted an university; others have attributed the term to the idea of the universality of the knowledge taught; but the real meaning of the word is what I have stated above.

‡ The term "faculty" was applied to any business or trade, as well as to the professions.

The University of Paris was the first formed, in the eleventh century; it was soon followed by that of Bologna; and these served as the pattern for that of Orleans and the others. The University of Paris was divided into four nations, the French, the Picardese, the Norman, and the English and German, proving how great was the concourse at this seat of learning, and how great was then the zeal for letters. Each nation had its procurator (the name derived from that of the governor of a Roman province), whence the proctors of Oxford and Cambridge. The Chancellor of the Church of St. Geneviève was the Chancellor of the University.

The date and mode of commencement of the UNIVERSITY OF CAMBRIDGE cannot, as already intimated, be determined with certainty. If it existed before the Norman Conquest, or if it were in sufficient repute for Henry I (Beauclerk) to have studied or taken the degree of Master of Arts here, as has been affirmed, it is, as Mr. Cooper remarks, rather strange that in the summary for Domesday Book there should be no mention of any university or academical society, or of anything which can induce a belief that such an institution existed here at that period. The first authentic account is to the effect that the Abbot of Croyland, in 1110, sent to his manor of Cotenham, near Cambridge, four monks, who had accompanied him from Orleans into England, and who were well instructed in philosophical problems and other primitive sciences; and that they, coming daily into Cambridge, openly taught their sciences in a hired barn, and, in a short time, collected a great number of scholars. From this "small fountain increased to a great river we behold all England made fruitful."

The friars and members of other religious houses assisted in the work; and the teachers and scholars formed themselves, after the continental model, into an association or university, electing their governing rector or chancellor, and acquiring the recognition and patronage of the sovereigns, who, especially Henry III, Edward I, Henry VI and VIII, and Elizabeth, showed them much favour, and granted them charters and many privileges. To royal patronage, indeed, the Universities of Oxford and Cambridge owe, if not their continued existence, yet very much of their prosperity; for the successive sovereigns showed an interest in them in many substantial ways, usually shielded them from their enemies, and required the several religious bodies in the country to maintain a certain number of students in them; and the attempts to establish universities elsewhere, as at Northampton in 1261 and Stamford in 1334, were forbidden, and the students were compelled to return to Oxford or Cambridge. Additional security and influence were obtained for this university by a papal bull, confirming all privileges and indulgences, and licensing the graduates to teach in any part of Christendom. This was granted, in 1318, by Pope John XXII, at the request of Edward II.

The teaching, at first open to any who chose to undertake it, was soon restricted to those who were judged to be qualified, and who were named professors of the several faculties. They were subsequently called Masters of Arts and Doctors of Theology, Law, or Medicine.\* These also formed the Senate; and by them the Chancellor was elected, biennially, from their own number. He was a resident in the University till 1482, when Thomas

\* The public teaching continued to be shared by all the doctors and masters, or as many as chose to take part in it (these being called *regents* in contradistinction to the *non-regents*, who did not take an active part), till the foundation of the five royal professorships by Henry VIII, when the public teaching was restricted to them, and the greater part of the more ordinary instruction devolved upon the colleges.



Rotherham, Archbishop of York, was elected Chancellor. The election was confirmed by the Bishop of Ely, from whom the Chancellor derived the power of excommunication and absolution, a power which proved one of the most effectual means of maintaining his authority. He was an ecclesiastic, so were most of the teachers; and most of the students were intended for the church. The papal bull superseded to some extent the authority of the bishop of the diocese; but sufficient was left to furnish subject for contention. Fisher, Bishop of Rochester, was, in 1505, appointed Chancellor for life; and from that time the duties of the office devolved upon the Vice-Chancellor, who was elected by the Senate. It is rather remarkable that Fisher and the three succeeding Chancellors—Cromwell, Earl of Essex; the Protector Somerset; and Dudley, Duke of Northumberland—laid down their office on the scaffold.

Most of the customs are traceable to the Universities of Paris and of Orleans. Some of those in the faculty of Law were derived from Bologna, and those in the faculty of Medicine were from Bologna, Salerno, and Montpellier. Many of the more peculiar of them have, however, of late, been discontinued.

Quarrels between scholars and burgesses commenced at an early period, and have continued, more or less, to the present; and these feuds between the University and the town have been not a little fomented and maintained by the privileges granted from time to time to the University. Many of these were vexing to the townspeople, such as the power of regulating the prices of provisions, of supervising the weights and measures, of citing the burgesses and other laymen to appear before the Vice-Chancellor to answer scholars in personal actions, etc. The ill feeling occasionally broke out in serious insurrections of the townspeople; and, in 1381, they declared war to the death, broke open the Colleges and the University chests, destroyed bulls, charters, and muniments, and compelled the University to execute deeds renouncing all their privileges, and submitting themselves to be governed, in future, by the law of the land and the ancient custom of the borough. "An old woman, named Margaret Starre, gathering the ashes of the burning documents, scattered them to the winds, and exclaimed, 'Away with the skill of the clerks; away with it.'" (Cooper.) It would have fared still worse with them, had not the Bishops of Norwich and Ely come to the rescue with lances and excommunications; and Richard II directed the punishment of the insurgents and the restoration of the privileges of the University. Most of these privileges and most of the ill feeling have, happily, disappeared under the softening influence of time; though remnants of the smouldering fire still, occasionally, blaze up in a town and gown row.

In early times, when books were scarce, teaching was conducted chiefly by lectures and readings of manuscripts in the public schools. The manuscripts were read by Bachelors and Masters of Arts, and so slowly as to permit the student to copy a good deal. Towards the beginning of the sixteenth century, printed books became so far common, that the readings were almost discontinued.\* The writings of Aristotle, including his Physics, Problems, and works on Natural History, as well as his dialectical, rhetorical, and ethical writings, which were principally known through translations and commentaries derived from the Arabs,† formed the chief subject of these lec-

tures and readings; and the authority of that philosopher held almost undisputed sway till the middle of the seventeenth century, when it rapidly declined under the combined influence of Newton and Bacon, Copernicus, Galileo, Kepler, and others, together with the increasing mental activity and inquiry consequent on the discovery of printing. Mathematics and natural philosophy acquired increasing importance as subjects of study and examination. In the middle of the eighteenth century, regular public examinations were instituted, which, in great measure, superseded the exercises in the schools; and those who most distinguished themselves were arranged in a "Tripos" list.\* The work of teaching fell very much into the hands of the Colleges and the private tutors, the University continuing, by its Vice-Chancellor, proctors, and other officers, to maintain the discipline, as well as to regulate and conduct the examinations for degrees.

At the present time, the University, with its scholarships and its degrees, is open to all comers, from all parts, and of all religious persuasions. There are about 1600 undergraduates, of whom more than a third are members of Trinity College. A matriculation fee of £5 is the only requirement at admission; and to have resided nine terms (that is, the major part of each of three years) at one of the Colleges, and to have passed certain examinations, and paid certain, not very high, fees, are the requisites for a degree. The instruction in mathematics and classics is chiefly conducted in the Colleges and by private tutors; that in theology, law, and medicine, and the several branches of natural and moral science, chiefly by the University professors; and a new impulse has recently been given to the professional teaching, by some increase of the stipends of the professors, by the building of museums and lecture-rooms for natural science, and by the establishment of honour triposes in natural and moral science. The desire to do more in the same direction is restrained by want of funds; for the University (considered apart from the Colleges) is not rich. Its income is not large; and is expended in the maintenance of its botanic garden and buildings, and in payments to officers and examiners, who are not particularly well paid after all.

The important feature in the education, apart from the social advantages of college life, is the "writing" that "maketh an exact man." The examinations are, for the most part, written; and the teaching, especially of mathematics, is chiefly by writing.

Undoubtedly, this practical, commercial, money-getting land is much indebted to Cambridge and her sister, for their influence in fostering the pure and abstract sciences, in maintaining a literary, philosophical, and critical spirit, and in encouraging those mental efforts which meet with little direct reward in the busy bustle of ordinary life. This influence is exerted, not simply through those who come within the pale of the Universities, but through the various schools which regulate their courses, more or less, in accordance with University requirements; and it has recently been greatly extended, in a new direction, by the happy idea of the "middle-class examinations". For how much of its philosophical spirit our own profession has been beholden to the Universities, is suffi-

of the sixteenth century. The office of Public Orator was created in 1522, with extraordinary privileges, with a view to its being given to Richard Croke, who introduced the study of Greek into the University, or rather first gave lectures here on the Greek language. The first book containing Greek characters printed in England is supposed to have been Linacre's translation of *Golden Age of Temperaments*. It was printed at Cambridge, in 1541, by John Flibberch, a German, who settled here.

\* So called, from the stool or "tripos" on which the disputing bachelor was formerly seated when keeping an exercise.

\* As showing how rapidly printing came into vogue, I may mention that, though the art of printing was not discovered till about the middle of the fifteenth century, and Caxton did not introduce it into England till 1475, yet, in a single collection lately bequeathed to the library of Trinity College, there are not less than a thousand books printed before the year 1500.

† The translations were replaced by the originals in the early part

ciently known to all who are acquainted with the history of medicine in England.

The degree of Doctor of Medicine was given, as I have shown, from a very early period, and was a qualification to practise medicine in any part of the kingdom, except in London, where the licence of the Royal College of Physicians was required. Under the Elizabethan statutes, which were in force till quite recently, there was a degree of Bachelor of Medicine, and also a "License to practise Medicine." The latter has been abolished lately; and the licence is now conferred by the Bachelor's degree. Under the same statutes there was also a "Licence to practise Surgery"; but it had been obsolete for many years. In the new statutes the surgical feature has been revived by the institution of the degree of Master in Surgery, which ranks with the degree of Master of Arts; and the two degrees—Bachelor of Medicine and Master in Surgery—give the right to practise every branch of the profession in any part of the kingdom.

The degree of Bachelor of Arts is obtained in three years; the degrees of Bachelor of Medicine and Master in Surgery in five years from first admission at the University. The fees for lectures are very moderate; and the expenses of living and education in Cambridge are not much more than those of a medical student in London; so that the additional cost of a Cambridge degree, as compared with that of a London diploma, is to be estimated chiefly by the greater length of time required (five years instead of four). In the case of the intelligent and industrious student, however, coming well prepared from school, so much is commonly defrayed by scholarships or exhibitions, which are distributed in the Colleges with a liberal hand, that to him the University offers a comparatively inexpensive entrance to the profession. (For further particulars, see the *Student's Guide to the University of Cambridge*.)

Many students who intend to proceed to medical or surgical degrees first take a degree in Arts; some employ the whole of their first three years in preparing for the examinations for that degree, and, perhaps, distinguish themselves in the mathematical, or the classical, or the natural sciences tripos, so as to obtain a fellowship at their College. Nothing can be better, as a mental preparation for the profession, than the training necessary for such distinction; and the £200 or £300 a-year attendant on a fellowship is an advantage which it is not difficult to appreciate. It is not, however, necessary to take an Arts degree at all. The student must spend a year, or a year and a half, in the Arts studies—that is, classics and mathematics—and pass an examination in them; but the last one and a half, or two, of his three years in Cambridge may, if he please, be devoted to medical and surgical study, instead of to the study of Arts; and the regulations require him, in any case, to spend some time in medical study in the University.

The opportunities for commencing medical and surgical study in Cambridge are very good.

1. There is Addenbrooke's Hospital, containing above a hundred beds, where clinical lectures on medicine and surgery are regularly given, and a good deal of attention is paid to clinical instruction; the students having the opportunity of examining cases closely for themselves, digitally as well as with eye and ear, and being encouraged to avail themselves of it to an extent and in a manner that is impossible where the concourse of pupils is large.

2. There is a good anatomical, physiological, and pathological museum, with opportunities for dissection, which have of late been considerably increased.

3. There is a chemical laboratory in St. John's Col-

lege, open to all students, with regular instruction in practical chemistry; and the University laboratory will soon be open; and a laboratory is being built in Downing College.

4. There are lectures on all the introductory branches of medical science (Anatomy and Physiology, Comparative Anatomy, Pathology, Chemistry, Botany, Materia Medica, and Principles of Surgery.)

It is by no means desired that medical education should be completed in Cambridge; merely, that it should be commenced. The initiatory work can be done here as well as elsewhere, or better; and the student then passes to another school, being at liberty to select London, Edinburgh, Dublin, or some other. By this plan, the advantages of pursuing his education in more than one place are assured to him; and he is saved from the narrowing influence which is likely to attend upon spending his whole time under one set of teachers.

The chief UNIVERSITY BUILDINGS are:

The SENATE HOUSE, a handsome, well proportioned, Corinthian edifice, by Gibbs, built by subscription, and opened in 1730. Most of the University examinations are held here, and all the meetings of the Senate (except those for discussion of graces or rules proposed to be brought forward, which are held in the schools under the Library); also, elections, conferring of degrees, etc. The undergraduates occupy the gallery, the members of the Senate the body of the house. Previously to its erection, the meetings of the Senate were held in the schools; the more important meetings being held in St. Mary's Church, which was fitted up with a stage on grand occasions; and the University chest was kept there.

The UNIVERSITY LIBRARY, with the schools beneath it, stands upon a "plot of ground which from time immemorial belonged to the University, upon which there had been erected certain schools for students in divinity and both the laws; also, a common library for the use of the students, especially poor scholars who were not able to procure books for themselves." It was augmented by Rotherham, Archbishop of York, and others; and in 1665, an Act was passed granting a copy of every printed book to each of the two Universities and his Majesty's library. It ranks next in this kingdom after that of the British Museum and the Bodleian at Oxford; and its regulations, allowing all members of the University and some others free access to it, and graduates to take out a certain number of volumes, are such as widely to extend its usefulness. It contains about 230,000 printed volumes, and a great number of manuscripts, of which the Beza MS. is one of the most ancient manuscripts of the Gospels extant. It is particularly rich in early English printed books.

The geological and mineralogical collections, both exceedingly good, are under the new part of the Library, erected 1837-40.

The CHURCH OF ST. MARY THE GREAT is the church of the University, and also a parish church. It is a fine specimen of late perpendicular Gothic, with a noble, well proportioned tower, containing an excellent peal of bells. The great bell, which tolls the "compline" or "curfew", from nine P.M. to a quarter past, is of remarkably rich tone. Immediately after the compline, the day of the month is struck upon another bell. The "matins" bell is tolled from a quarter to six A.M. to six. The chimes, at each quarter of an hour, are by Crotch from Handel. The building of the church was commenced in 1478, upon the site of a former church in which the services of St. Mary's Guild were held. The tower was not completed till 1608.

In 1556, this church and St. Michael's were inter-



dicted, by a commission appointed by Cardinal Pole, on account of the burial of Bucer and Fagius in them. The bodies were consequently exhumed and burnt, and the churches purified and reconciled.

THE PITT PRESS. Printing extended so quickly after its discovery that, in 1529, the University presented a petition to Cardinal Wolsey that, for the suppression of error, there should be three booksellers, or printers, allowed in Cambridge, who should not sell any book which had not been approved by the censors of books in the University. Letters patent to this effect were granted by Henry VIII in 1534. For nearly two hundred years, the Universities of Oxford and Cambridge and the Company of Stationers enjoyed the exclusive privilege of printing almanacks. This was lost in 1779, and a grant of £500 *per annum* was made as compensation for the loss, and is expended in the publication of new works or fresh editions of old works. The two Universities and the Queen's printer have still the exclusive privilege of printing Bibles and prayer-books.

THE FITZWILLIAM MUSEUM, one of the finest of modern Grecian buildings, was designed by Basevi, and built with funds left for the purpose, with his collection of pictures, by Viscount Fitzwilliam. It was begun in 1837. It contains specimens of most of the great masters—one of the best specimens of Paul Veronese in the country, an early Raphael (doubted), good Rembrandt, G. Dow, Adrian Vanderveld, etc., a beautiful ivory model of a mausoleum, and other curiosities and works of art. On the ground floor, is a collection of antique marbles and plaster casts of some of the most celebrated works of antiquity; also, a library containing rare and valuable books and illuminated MSS. and missals. A most valuable cabinet of Greek coins has lately been purchased.

THE ANATOMICAL SCHOOL does not prepossess by its exterior, but contains an excellent museum, the nucleus of which was formed by Sir Rusick Harwood and former Professors of Anatomy. The collection of Dr. Macartney of Dublin was added by purchase; and large additions have been made by the present Professor. Recently, the interesting physiological series of the late Professor Schröder van der Kolk of Utrecht has been lodged here. Behind are dissecting- and lecture-rooms; also, botanical and chemical lecture-rooms and laboratories. A change in the disposition and arrangements will take place as soon as the new museums are completed, and additional space, which is much required, will be then obtained.

There is a new and well arranged BOTANICAL GARDEN, on the Trumpington Road, near the town; and the OBSERVATORY, erected by subscription in 1822, is on the side of the Madingley Road.

### The Colleges.

Originally, when the University consisted of a mere voluntary aggregation of teachers and students, all lived where they could. The major part were in lodgings in the houses of the townspeople; or they "chummed" two or three students together; or several resided together in a house under the superintendence of a teacher. Such houses were called "inns", "halls", or "hostels". These became, after a time, recognised institutions and important features in the University. Certain oaths were exacted of the principals; and a regular list of the houses, as well as of the scholars dwelling in them, was kept. The principals, who were usually graduates, assisted in the instruction of their pupils; but only in subservience to the public lectures and exercises in the University.

These hostels were, in their origin and nature, private establishments—private speculations—and were without endowments. The first collegiate foundation, with endowments for the maintenance of scholars, etc., was that of St. Peter's, by Hugh de Balsham, Bishop of Ely, in 1284 (University and Baliol and Merton\* Colleges in Oxford were founded a few years previously). By the middle of the next century, five of the seventeen Colleges now existing—Clare, Caius, Pembroke, Trinity Hall, and Corpus—were added; besides others, as Michael House and King's Hall, which have been demolished. They were called "Halls" or "Houses"; though they have all, with the exception of Trinity Hall, assumed the title of "College". Their statutes were simple and without restrictions as to the localities from which the scholars might come. The buildings also were simple, without chapels, the prayers being kept in the neighbouring churches; and private passages still connect St. Peter's College with Little St. Mary's Church and Corpus Christi College with St. Benedict's Church. An interval of a century elapsed; and then followed seven other of the present foundations in quick succession—between 1430 and 1511—and chiefly by royal bounty. They are Magdalene, King's, Queen's, St. Catherine's, Jesus, Christ's, and St. John's. During the interval, severe animosities and contests, even to the shedding of blood, had arisen between northern and southern students, and students of different counties; so that the natives of a particular district, getting the ascendancy in any College, would select exclusively their own local associates and connections, and thus converted the Colleges into clans. For the purpose of obviating this evil in the new foundations, statutes were introduced to regulate the elections, and to prevent more than two fellows from being chosen from the same county; and some of the older Colleges were remodeled upon this plan.† This restriction being, in course of time, found to operate prejudicially, has been removed in the recent revision of the statutes.

The next foundation was Trinity College, upon a grand scale, by Henry VIII, in 1546. At that time, the Colleges were more like modern schools, and students used to come to the University at a much earlier age than at present, about 14. Three or four scholars were assigned to one chamber, with, perhaps, a Master of Arts or a B.D.; separate beds being provided in most Colleges for scholars above 14. This practice of chumming three or four in a room, which seems to have been a great promoter of a certain contagious skin-malady, was discontinued early in the seventeenth century, in consequence of the increased age of the students. A doctor was usually allowed a chamber to himself. The students were closely watched, and confined to their respective Colleges, except during attendance on lectures at the public schools, or unless attended by a Master of Arts. They were expected to converse in Latin, Greek, or Hebrew; though, as may be supposed, this injunction was not very strictly obeyed. At five in the morning, they assembled in the College chapel; and at six, went to the hall to hear lectures and perform exercises. At nine a.m., they went to the lectures of the public professors; dined at eleven; at one, returned to declamations and exercises; from three to six, were at liberty to pursue their amusements and studies; at six, supped in the College hall;

\* It is thought by some that Walter de Merton founded a house, called "Merton Hall", for scholars at Cambridge, at the same time or previously to the one at Oxford; and, subsequently, united the two under the one foundation at Oxford.

† The terms "Antistes" and "Rector" are frequently mentioned in the statutes, indicating a division something like the division of the University of Paris into "nations". The causes of the quarrels between them are not clear.

and immediately afterwards retired to their chambers. Neglect of lectures and other offences were punished, in the case of the younger students, by corporal punishment, in the College hall, at seven in the evening, in the presence of all the students.

In consequence of the increased accommodation afforded by Trinity and St. John's Colleges, the hostels were no longer required; and, from a period dating not long after that time, all students coming to the University have entered at one or other of the Colleges, and have kept their terms by residence within the College walls, or in lodgings under the surveillance of the College authorities, and by attending the lectures, chapels, and halls, in the Colleges.

Each College is presided over by a Master. There are a certain number of Fellows, Scholars, and Sizar,\* also Fellow-Commoners; and the remainder are the ordinary students, or Pensioners. The number of the latter is unlimited; and from them and the sizars, the scholars and fellows are chosen by examination, chiefly in classics and mathematics, though some weight is in certain Colleges (Sydney and Downing) given to natural science. The revenues of the Colleges are large; and the scholarships and fellowships are very numerous. The scholarships range in value from £30 to £80 *per annum*; the fellowships from £200 to £400. Besides the scholarships and fellowships, there are a great number of exhibitions and prizes in money and books; so that the pecuniary attractions are really enormous, far surpassing the general estimate of them by those who are not well acquainted with the College funds and the mode of their distribution.

Originally, the Colleges, or most of them, were entirely charitable institutions, founded at a time when the majority of students had to undergo great privations in order to maintain themselves at the University, and when great difficulty was found in supplying the churches with incumbents of even moderate attainments. Latterly, the greater diffusion of wealth and education has led to an alteration in the application of the funds of the Colleges; and they are now employed, chiefly, to furnish rewards for industry and ability. The premia are given to the best, rather than to the poorest men, though a great deal is still done to help the latter class.

Of the Scholarships, some, called "Minor Scholarships", are open to competition for students who have not yet entered the University; that is to say, students from the various schools come up to the examinations at the several Colleges, of which notice is given some time beforehand in the *Times* and other papers. If they are successful, they come into residence. The greater number of scholarships, however, are given to those who stand highest in the College examinations at the end of the first or second year of residence.

The Fellowships are given usually to those who take the best degree; that is, who stand highest in the tripos examinations. In Trinity College, there is a separate examination for the fellowships. A fellowship is in most instances vacated by marriage; but this restriction has, in many colleges, been recently modified, and in some (Caius, Clare, Queen's, and Downing), nearly abolished. Some fellowships are tenable for ten or fifteen years; others for life.

There are seventeen Colleges.

ST. PETER'S COLLEGE was founded by Hugh de Balsham, Bishop of Ely, in 1284. (See account of St. John's College.) None of the original building remains. It was partly, if not entirely, destroyed by

fire in 1420. The College services were celebrated in the neighbouring church of St. Mary the Less, till the consecration of the present Italianised Gothic chapel in 1623. It has recently been embellished with stained glass windows from Munich.

There are fourteen fellowships and twenty-three scholarships: twelve of the latter of £60, six of £40, and five of £20 *per annum* each.

The poet Gray was a member of the College.

CLARE COLLEGE was founded as University Hall in 1326, and was re-endowed, and the name changed into Clare, by the Countess of Clare in 1338. The present handsome building was commenced about 1638; the chapel in 1763. Originally, service was performed in St. Edward's Church.\*

There are seventeen fellowships and twenty-four scholarships: eight of the latter of £60, eight of £40, and eight of £20 *per annum*; besides one of £60 and one of £40, open to students who have not come into residence.

PEMBROKE COLLEGE. Mary de St. Paul, widow of Aymer de Valence, Earl of Pembroke, "maid, wife, and widow, all in a day (her husband being unhappily slain at a tilting at her nuptials), sequestered herself, on that sad accident, from all worldly delights, bequeathed her soul to God, and her estate to pious uses, amongst which this a principal, that she founded, in Cambridge, the College of Mary de Valentia, commonly called Pembroke Hall, in 1347."†

A venerable and picturesque College—a considerable part of which has probably not undergone much change since the time of the foundress—with pleasant garden, where Ridley loved to stroll. The chapel was built by Sir Christopher Wren, at the cost of his uncle Dr. Matthew Wren.

Archbishops Grindal and Whitgift, Bishop Andrews, and William Pitt, were also members of this College; and Dr. Thomas Wharton (Wharton's duct), author of the *Adenographia*, who died 1673.

There are fourteen fellowships and twenty scholarships: eight of the latter of £60, six of £40, and six of £20 *per annum*.

GONVILLE AND CAIUS COLLEGE was founded in 1348 by Edmund Gonville in Freeschool Lane, where is now the old court of Corpus Christi College, but was soon moved to its present site, or rather to the site of the third court, which is still called "Gonville Court". It was re-founded by Dr. John Caius in 1557; and ever since his time it has had pre-eminence as the medical college. This eminent and learned man was a fellow of Gonville Hall, and first turned his attention to divinity, translating several prayers and theological works from Greek and Latin. He went to Padua, and was professor of Greek there in 1541. He there graduated as M.D., having studied medicine under John Baptist Montanus, and lived eight months in the house of Vesalius studying anatomy. He visited the Italian towns, and attended the medical lectures of Matthæus Curtius at Pisa. Returning to England, and admitted a fellow of the College of Physicians, he practised at Cambridge, then at Shrewsbury (where he wrote a tract on the sweating sickness), subsequently at Norwich, and ultimately in London. He was physician to Edward VI, Queen Mary, and Queen Elizabeth; also, president of the

\* The "Soler Hall", mentioned by Chaucer in his *Reve's Tale*, is considered by Cooper not to have been this college, but Garret Hostel, near by; a soler or sun-chamber being equivalent to a garret. Neither does he think there is substantial foundation for the tradition that Chaucer was a member of this college.

† "The aforesaid Mary de Valentia founded also Denny Abbey, north Cambridge, richly endowed and filled with nuns, whom she removed from Waterbeach. She enjoined also her fellows of Pembroke Hall to visit those nuns, and give them ghostly counsel on just occasions; who may be presumed (having not only a fair invitation, but full injunction) that they were not wanting both in their courteous and conscientious addresses unto them." (Fuller.)

\* So called, probably, from their waiting in former times on the fellows, and serving them with the "sizings" or food from the butteries.



College of Physicians nine times. At the request of Henry VIII, he delivered lectures on anatomy for the instruction of the surgeons in London, and continued that for twenty years. Indeed, he may be said to have introduced the study of practical anatomy into England. He was regarded as the most learned man of his age, being eminent as a classical scholar, a physician, an anatomist, a naturalist, and an antiquary. The list of works which he wrote or edited amounts to thirty-four, a history of the University of Cambridge being one of them. He did not escape charges of Romanism on the one hand, and atheism on the other; "having a perverse stomach to the professors of the Gospel."

He largely endowed this College, and built the middle court, as well as the three peculiar gates, respectively inscribed to "humility", to "virtue and wisdom", and to "honour"; was master of the College; and was buried in the chapel, where is his tomb and epitaph,

"Vixit post funera virtus.

Fui Caius.

.Etatis sue lxxiii. Obiit xxix Julii, A.D. 1573."

A portrait of him hangs in the hall, and another in the combination-room.

The present dining-hall was built in 1854, from designs by Salvin; and the excellence of the repasts served in it has acquired for the College the not unenviable title of "Culinary Caius."

The discoverer of the circulation of the blood was a member of this College; a portrait of him is in the hall, and another, by Rembrandt, in the master's lodge. Sir Thomas Graham (founder of the Royal Exchange), Jeremy Taylor, and Dr. Wollaston, were also students here; besides a long array of eminent physicians, as shown by the Roll of the College of Physicians and the list of its present fellows.

There are thirty fellowships; and thirty-six scholarships, ranging in value from £20 to £60. One of the latter is given annually for anatomy and physiology, and one for chemistry. Besides these, there are four Tancred studentships for medical students, of the annual value of £100 each. Two of the scholarships (£60 each), one for classics and one for mathematics, are generally given at Easter, after open competition, to students who have not entered.

TRINITY HALL was founded by William Bateman, Bishop of Norwich, in 1350, as a college for scholars of canon and civil law; and it continues to be peculiarly the legal college. The small gate near Clare is probably part of the original structure. It and a larger gate close to it, forming a double gateway, were the only entrance to the College.

Stephen Gardiner, Bishop of Winchester, was master of the College till his death. He would never give up this post; but said, "if all his palaces were blown down by iniquity, he would creep honestly into that shell." Glisson, the anatomist, was a member of the College.

There are thirteen fellowships, chiefly for persons intending to pursue the legal profession; and sixteen scholarships, from £50 to £60 *per annum*, besides two for students who have not commenced residence.

CORPUS CHRISTI COLLEGE was founded by the Guilds of Corpus Christi and of St. Mary in 1352, upon the site occupied by Gonville Hall, the services being held in St. Benedict's Church. These two guilds were incorporated together, and "being thus happily married, were not long childless, but a small college was erected by their united efforts." The great ale-horn belonging to the Guild of Corpus Christi, finely ornamented with silver gilt, is still in possession of the College.

The old court was erected in the middle of the sixteenth century; the handsome new court facing the

street in 1823—Wilkins, the architect. The library contains one of the most valuable collections of MSS. in the kingdom. It was collected by Archbishop Parker soon after the dissolution of the monasteries, and left by him to the College.

Sir Nicholas Bacon was a member of the College and a benefactor; Archbishop Tenison, Drs. Stukely and Pitcairn, were also members of the College.

There are twelve fellowships; twenty-five scholarships, from £20 to £60 annually, tenable for three years; and six sizarships (about £30 a year each); also, a fund from which gratuities are given to deserving students.

KING'S COLLEGE was founded by Henry VI in connection with Eton in 1440, on the site of several hostels. This King, during his foreign wars, seized various estates belonging to continental monasteries, and with this alien property richly endowed the College. Its members were exempted from the power and jurisdiction of the University, except in scholastic matters. It has undergone great alteration. Of the original court, the elegant entrance gateway opposite Clare College only remains. The first stone of the splendid chapel was laid by the founder himself about 1446. The building was not completed till 1534. (For particulars of it, see the *New Cambridge Guide*.) The "Fellows' Building", by Gibbs, was erected in 1724; the remainder, including the screen, by Wilkins, in 1824.

There are forty-six fellowships and forty-eight scholarships; value of the latter £80 *per annum*. All at present are elected from Eton.

QUEEN'S COLLEGE boasts of two royal foundresses. Margaret of Anjou, Henry the Sixth's Queen, "beholding her husband's bounty in building King's College, was restless in herself with holy emulation until she had produced something of like nature"; and the good work begun by her in 1448 was perfected by her professed enemy, Elizabeth Woodville, Queen of Edward IV.

"Erasmus (who, no doubt, might have picked and chose what house he pleased) preferred this for his place of study some years in Cambridge." Nevertheless, he does not seem to have been quite content; for "he often complained of the College ale as raw, small, and windy." His rooms are shown, and a walk in the grounds goes by his name.

This College is a good example of the plan upon which colleges (and, indeed, houses; for it corresponds closely with Haddon Hall and some others) were built. A massive handsome gateway (such gateways are peculiar to Cambridge) leads into a square court, with entrances to staircases and rooms on two sides. On a third side, is the chapel and library. On the fourth, opposite the gateway, are the dining-hall, butteries, and kitchens, with the passage-way to the second court, by no means conveniently placed between the hall and the butteries. At the north end of the hall, is the combination-room; and over it, approached by a staircase from the second court, was the master's room; that is, the room in which the master dwelt, the rule of celibacy, then, applying to the masters as well as to the other members of the Colleges. From this room runs westward, a long gallery, with windows on both sides but not opposite one another. It forms the north side of the second, or cloister, court, and is a curious feature; it is not very clear what purpose it served. The same general plan, of court with entrance gateway, rooms, chapel, library, hall, butteries, combination- and master's rooms, and gallery, may be traced in other Colleges, especially Pembroke and St. John's.

There are fourteen fellowships; and seventeen scholarships, from £30 to £50 *per annum*; of these, two (£40) are open to competition before entrance.

There are also other prizes and exhibitions, amounting to £250 annually.

ST. CATHERINE'S COLLEGE was founded by Dr. Woodlark, in 1475. It was rebuilt about 1680.

Dr. John Addenbrooke, the founder of Addenbrooke's Hospital, was a member of this College; also, John Ray, the naturalist.

There are nine fellowships; and twenty-one scholarships, from £25 to £50 *per annum* or more; of these, on an average, three annually are open to competition before entrance. There are besides, sizarships and other rewards. The sum total given, exclusive of fellowships, is about £1000 a year.

JESUS COLLEGE. The nunnery of St. Rhadegund was dissolved in consequence of the negligence, improvidence, and dissoluteness, of its inmates; and this College was founded in its place by Alcock, Bishop of Ely, under license from Henry VII, in 1497. The scholars were to be instructed in grammar, and pray for the King and his family and the Bishop, during their lives, and for their souls after their death. The chief part of the church of the nunnery remains, forming the beautiful College chapel, the ante-chapel, and the master's lodge. The style is transition Norman and early English. The chapel has recently been restored.

There are sixteen fellowships and thirty scholarships.

There are portraits of Harvey, Cranmer, Henry VIII, and Mary Queen of Scots, in the combination-room. Cranmer,\* Pearson, and S. T. Coleridge, were at this College.

CHRIST'S COLLEGE. Margaret, Countess of Richmond and Derby, mother of Henry VII, in 1505, re-founded God's House, which had been moved from the site of King's College to near St. Andrew's Church, and named it Christ's College. The members of the College were to study grammatical and other sciences, and to celebrate divine services and obsequies for the healthful state of the Countess, the King and his children, during their lives, and for their souls after their death.

The first court was re-cased with stone in the eighteenth century.

There are some curious books and MSS. in the library; and in the garden, which is pleasantly laid out, is the mulberry tree planted, according to tradition, by Milton, when he was a student at the College. Latimer, Bancroft, Porteus, Cudworth, and Paley, were students here.

There are fifteen fellowships; thirty scholarships, from £30 to £70; four sizarships, £50 each *per annum*; besides exhibitions, and four Tancred studentships in divinity, £100 each *per annum*. Of the above thirty scholarships, five, on the average, are open annually to competition before residence.

ST. JOHN'S COLLEGE. About 1135 a hospital was founded on the site of this college, dedicated to St. John the Evangelist, for a master and brethren of the rule of St. Augustine. One wall of what is supposed to have been the chapel, or the infirmary chapel, of the original hospital, has been uncovered in the recent alterations, and is still exposed to view, with its Early English arches and its double piscina. It had been built into the college, according to the practice in former times of not sacrificing any piece of an old building that could be made available in a new one. It is supposed that scholars were added in the early part of the next

century, so forming the earliest endowed educational or collegiate institution. The evidence of that, however, is not very clear. In 1280, Hugh de Balsham obtained permission from Edward I to place secular scholars here; but, as they and the regulars did not agree very well, he removed them to two hostels near St. Peter's Church; so founding St. Peter's College, or Peterhouse. The brethren, who did not amount to above five or six, then enjoyed their hospital in peace till it was dissolved on account of their ill conduct and prodigality, and in compliance with the intention and bequest of the Lady Margaret, Countess of Richmond, in 1509, by her grandson, Henry VIII; and the College of St. John was founded in its place. The dissolution of the hospital and the institution of the college were confirmed by a bull by Pope Julius II. Over the entrance gateway are the arms, etc., of the foundress, interspersed with representations of the daisy, which was her rebus or name-device, being in French called *Marguerite*.\*

Of the four courts, the first was built at the beginning, the second at the end of the sixteenth century; the third somewhat later; and the fourth, which is delightfully situated, in 1827 (Rickman and Hutchinson the architects). The Library, a handsome room with fine windows (Jacobean Gothic), built in 1620, contains many valuable books and MSS.; among others a copy of Cranmer's Bible, which belonged to Cromwell, Earl of Essex, and is one of the finest of vellum books. Roger Ascham; the great treasurer Cecil; Ben Jonson, Stillingfleet, Bentley, Kirke White, Henry Martyn, Dr. Heberden, Rowland Hill, Wilberforce, Wordsworth, and Lord Palmerston, were members of the college.

A Gothic chapel, promising to be second only to King's chapel in the two Universities, and a Master's Lodge, (by Scott), are in process of erection; and other improvements are to follow.

There are fifty-six fellowships; sixty foundation scholarships, £50 *per annum*—not less than twelve given annually; besides eight (four annually), of the same or greater value, which are open to students before they have entered; nine sizarships, £35 annually, and several exhibitions and prizes.

MAGDALENE COLLEGE. There was formerly on this spot a house or College, established in 1428 by the Abbot of Croyland, for monks of the Benedictine order, or "black monks," who studied canon law and theology in the University. It was called "Monks Hostel," afterwards Buckingham College, in honour either of Edward Stafford, the last duke of that family, who was beheaded, or of his father. On the suppression of the monasteries, it passed to the Crown, but was soon afterwards refounded as Magdalene College† by Thomas Lord Audley, Chancellor of England. Samuel Pepys gave his library, containing his diary‡ and other curious MSS. and books, including

\* "Some of the provisions are curious. Two fellows or four scholars were to sleep in each chamber. None but a doctor was to have a chamber to himself. The gates were to be locked at 8 p.m. in winter and 9 in summer. Scholars were to be fined for speaking English within the College. Some of the students were to learn Greek and Hebrew. A fourth part of the fellows were to be engaged in preaching to the people in English. No one was to keep hawks or dogs, or to play at cards or dice, except at Christmas, and then only in the hall. The fellows were to have a livery of one colour, to be bought at Sturbridge fair." (Cooper in *Memorials of Cambridge*.)

† O. Maundlin, it is said, as containing his surname between the initial and the final letters—M'Audley'n. He came in for his share of monastery lands, including the site and precincts of the Abbey of Walden, and was created Lord Audley of Walden. The Audley End House, thirteen miles from Cambridge, was built by his grandson Thomas Howard, Earl of Suffolk (1603 to 1616), on the site of the Abbey of Walden, and was the most splendid mansion of the time. It was sold to Charles II, and was for a time the residence of William III. The greater part of it has been pulled down. It now belongs to Lord Braybrooke.

‡ It was in cypher, and attracted the attention of the late Master of the College, whose uncle, Lord Grenville, furnished the key.

\* Cranmer was a scholar and fellow of the college, but vacated his fellowship by marrying the niece of the husband of the Dolphin, a tavern of good repute at the Bridge Street end of All Saints' passage. He then lived at the Dolphin, and became a common reader in Buckingham (Magdalene) College. His wife died in childbirth within a year of his marriage; and he was immediately afterwards re-elected a fellow of Jesus College. (*Athenæ Cambr.*)



Henry the Eighth's love-letters to Anne Bullen. They begin, "Sweet darling," and end generally, "Signed with the hand that I would were yours." It is in the building in the second court, with the inscription, "*Mens cujusque est quisque.*"

There are eight fellowships, and twenty-five scholarships, besides other rewards.

TRINITY COLLEGE is the noblest institution of the kind in the kingdom, if not in the world, and the one which has done more than any other to advance knowledge, to quicken intellect, and to raise the standard of education in the country. Here, in an observatory over Henry the Eighth's gateway, since removed, Newton, *qui genus humanum ingenio superavit*, contemplated the heavens, and, in a laboratory near the chapel, in front of the College, also removed, worked at chemistry. Here were Fabius and Bucer; here Bacon and Byron, Porson and Macaulay, and a long list of philosophers and poets, of peers, prelates, and statesmen, worked and played, at the time of life when work and play can best be done. Here Whewell and Sedgwick now enjoy, enlarge, and diffuse their rich inheritance of learning and of name. There are above 550 undergraduates on the boards of the College, nearly all in residence.

It was founded by Henry VIII in 1546, as some compensation to conscience and to Cranmer, to the church and to learning, on the sites and with the revenues of King's Hall\* and Michael House,† and other hotels and inns, which he seized, adding thereto, and "compounding thereout one fair College, the stateliest and most uniform in Christendom."

The College was begun in style fitting the views of the Grand Monarque, who, whatever were his faults, was a learned and accomplished man and a patron of literature; and the Great Court, built soon after his death, is said to be the most spacious quadrangle in the world.‡ The Hall, built in 1604, is a noble, well-proportioned structure, but insufficient to dine all the members of the College at once. The hospitality which has ever been shown here is almost as celebrated as the learning and character of those who dispense it. The stone fountain, in the middle of the quadrangle, was built by Dr. Neville, twelfth master, by whose munificence the second, or cloister, or Neville Court, was in great part erected. The Library at the end of this Court, by Sir Christopher Wren, commenced in 1676, is a magnificent building, containing a handsome, spacious room, in which Thorwaldsen's statue of Byron, and the MS. of *Paradise Lost*, when it was sketched out as a tragedy, are among the numerous objects of interest. There are above 50,000 printed volumes, and numerous and valuable manuscripts; also a valuable collection of books relating to Shakespeare, from which is derived much of the information for the Cambridge edition of Shakespeare, now being edited by two members of the College. The "New" or "King's" Court was commenced in 1823. The elegant "Master's" Court, opposite the great gateway of the College, was erected by the present master in 1860—*paci sacrum*. The organ in the chapel is one of the best in Eng-

land; and there is the noble statue of Newton, by Roubiliac, here.

Sir Everard Home was a member of Trinity College.

There are sixty fellowships; seventy-two scholarships, £80 a year in value; six minor scholarships, £50, open every year to all persons, under twenty, who have not yet commenced residence, or are in their first term; sixteen sizarships, £60 a year at least.

A prize of £25 is given to each sizar in the first class in the general examination; £15 to each in the second class; and £10 to each in the third class. Thus a sizar, who also obtains a minor scholarship, may receive £130 a year, at least, from the College.

There are also several other exhibitions and prizes.

EMMANUEL COLLEGE was founded on the site of the house of the Dominican or preaching friars, in 1584, by Sir Walter Mildmay, Chancellor of the Exchequer to Queen Elizabeth. It soon attracted great numbers of students. The Hall is on the site of the Friars' Church. The Library was the refectory; it at one time served as the College Chapel. The present Chapel was built, in 1760, from Sir Christopher Wren's designs.

There are twelve fellowships; twenty-two scholarships, two open to competition before entrance; four sizarships; besides other exhibitions and prizes.

SIDNEY SUSSEX COLLEGE was founded by the bequest of Frances Sidney, relict of the third Earl of Sussex, in 1596, on the site of the house of the Franciscan friars. Oliver Cromwell was a student here, but took no degree; and there is a valuable and celebrated drawing in crayon of him, by Samuel Cooper, in the Master's Lodge. The College has been refaced and altered in this century. There is a scientific library, and also a chemical laboratory.

There are nine fellowships; twenty-seven scholarships; and twelve junior scholarships, open to students who have not entered. Some of these are given for proficiency in natural science. Besides these, there are exhibitions and prizes.

DOWNING COLLEGE, the most recent foundation in either University, was founded by the will of Sir George Downing, and opened in 1821, and intended much for the encouragement of law and medicine. Besides the Master, there are two Professors—one of the Laws of England, and one of Medicine.

There are eight fellowships (six restricted to Law and Medicine); ten scholarships, £50 annually, with rooms and commons. Two or three minor scholarships (£40) are open to competition annually before entrance. In the election to all the scholarships, considerable importance is attached to proficiency in natural or moral science.

If the number of Fellowships in all the Colleges be added together, it will be found that they amount to 353; the average value of each of which is, probably, about £250 *per annum*. It is computed that about £25000, annually, are given in scholarships, exhibitions, and prizes in the Colleges, besides the University scholarships. There are, moreover, seventeen masterships of Colleges; and more than three hundred livings in the gift of the Colleges. These vary much in value. Many are very good; and, as each that becomes vacant is offered, according to seniority, to those fellows of the respective Colleges who are in holy orders, they form, it need scarcely be said, a very important item in the attractions of Cambridge. To all these must be added the Professorships and other University offices; the emoluments of which are, in some instances, high, though, for the most part, that is not the case. Of the prodigious forcing

\* KING'S HALL was founded by Edward III. in 1357, carrying out the intentions of Edward II. who maintained certain scholars in hotel houses. It was the largest College in the University. Two of its gateways remain as parts of the great court of Trinity; viz. the King's, or entrance gateway, which has been raised, and a statue of Henry VIII has been added; and Edward III's gateway, which stands at the west end of the chapel, its place having been altered and a story added.

† MICHAEL HOUSE was founded by Hervey De Stanton, in 1344, and connected with St. Michael's Church. Queen Elizabeth's gateway at the south side of the great court, was the entrance gateway of this house.

‡ It occupies an area of two acres and six perches. The architect was Ralph Simons. He was also the architect of the second court of St. John's, of Sidney, and Emmanuel Colleges.

power thus represented (and there is about an equal amount in Oxford), sufficient, surely, may be spared, without real detriment, from Arts, Theology, and Law, to produce a decided and beneficial influence upon Natural and Medical Science.

## Association Intelligence.

### BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-second Annual Meeting of the British Medical Association will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3rd, 4th, and 5th days of August next.

*President*—JOHN A. SYMONDS, M.D., F.R.S.Ed., Clifton.

*President-elect*—GEORGE EDWARD PAGET, M.D., Cambridge.

All the General Meetings of the Members will be held in the Senate House.

WEDNESDAY, August 3rd.

12 NOON. Meeting of Committee of Council in the Arts School.

2.30 P.M. Meeting of the General Council in the Arts School.

4 P.M. First General Meeting of Members. The retiring President (Dr. Symonds) will resign his office. The new President (Dr. Paget) will deliver an Address. The Report of the Council will be presented, and other business transacted.

9 P.M. The Members of the Association are invited by the Master and Fellows of Gonville and Caius College to a *Conversazione* in the College Hall.

THURSDAY, August 4th.

8.30 A.M. The Members of the Association and their friends will breakfast together in the Guild Hall. Tickets Three Shillings each.

10 A.M. Meeting of the Members of the New Council in the Arts School.

11 A.M. Second General Meeting of Members. The first presentation of the Hastings Gold Medal will be made, for a Prize Essay in Physiology. Papers and Cases will be read.

4 P.M. Third General Meeting of Members. The Address in Medicine will be delivered by EDWARD L. ORMEROD, M.D.

The Report of the Medical Benevolent Fund will be presented.

Cases and Papers will be read.

9 P.M. The Members of the Association are invited by the Master, Professors, and Fellows of Downing College, to a *Conversazione* in the College Hall.

This day (Thursday), by the permission of the Provost and Fellows of King's College, there will be Full Choral Service in the College Chapel at 3 P.M.

FRIDAY, August 5th.

10 A.M. Fourth General Meeting of Members. A Report will be read from the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund. Papers and Cases will be read.

4 P.M. Fifth General Meeting of Members. The Address in Surgery will be delivered by G. M. HUMPHREY, M.D., F.R.S. Papers and Cases will be read.

6.45 P.M. The Members of the Association and their Friends will dine together in the Hall of Gonville and Caius College. Tickets One Guinea each. Gentlemen intending to be present at the Dinner are

requested to send notice to Dr. P. W. LATHAM, Sidney Street, Cambridge.

Members are requested to enter, immediately on arrival, their names and addresses in the Reception Room at the Guild Hall, when cards will be supplied which will secure admission to all the proceedings.

A Clerk will be in attendance at the Reception Room, and will give information respecting lodgings-houses.

The principal Hotels are the "Bull", the "Eagle" the "Red Lion", the "University Arms", and the "Hoop".

*Return Tickets* to Cambridge from London and such other stations on the Great Eastern, London and North Western, and Great Northern Railways, as usually issue them, will be granted to members of the Association producing vouchers on the 2nd, 3rd, 4th, and 5th of August, and will be available up to the 6th inclusive.

Members who wish for vouchers or for information previous to the Meeting, may communicate with Dr. P. W. LATHAM, Sidney Street, Cambridge.

*Notices of Motion.* Dr. STYRAP will move the following alteration in Law xv. To insert, after the words "One Guinea annually", "provided that such sum be paid not later than June 30th; after which date, each Member shall pay, in default, £1:5."

Mr. WATKIN WILLIAMS will move to alter Law xv. by inserting "the 1st of December", instead of "the 25th of December."

*Papers* have been promised by—SPENCER WELLS, Esq. (London): Some of the Causes of Excessive Mortality after Surgical Operations.

SYDNEY JONES, M.B. (London): Injuries of the Head. JOHN BRIDGER, Esq. (Cottenham): Diphtheria, and some of the *Post Mortem* Appearances.

A. E. SANSOM, M.B. (London): The Action of Anæsthetics; and the Administration of Chloroform.

T. HERBERT BARKER, M.D. (Bedford): Herniotomy without Opening the Sac; with Cases.

J. V. SOLOMON, Esq. (Birmingham): The Radical Cure of extreme Divergent Strabismus.

EDWARD WOAKES, M.D. (Luton): Neuralgia.

B. W. RICHARDSON, M.D. (London): 1. New Researches on the Pathology of the Blood; 2. New Instrument for the Inhalation of Oxygen.

SAMUEL MARTYN, M.D. (Clifton): The Physiological Meaning of Inframammary Pain.

GEORGE PHILIPSON, M.D. (Newcastle-on-Tyne): Intussusception.

GEORGE BUCHANAN, M.D. (Glasgow): Tracheotomy in Croup and Diphtheria.

ROBERT CHRISTISON, M.D. (Edinburgh): Medical Education.

C. H. F. ROUTH, M.D. (London): 1. The Use of the Hysterotome in Uterine Disease; 2. The Diagnosis of Early Pregnancy.

ERASMUS WILSON, Esq., F.R.S. (London): The Nature, Varieties, and Treatment of Eczema.

BALMANNO SQUIRE, M.B. (London): Occipital and Constitutional Impetigo of the Scalp.

THOMAS HILLIER, M.D. (London): 1. Diphtheria; 2. An Outbreak of Tinea decalvans or Alopecia areata in a Public School.

HENRY DICK, M.D. (London): A New Instrument for the Treatment of Spinal Curvature.

FRANCIS E. ANSTIE, M.D. (London): Certain Points in the Treatment of Diabetes.

WILLIAM BUDD, M.D. (Bristol): A few Verbal Remarks on the Rinderpest or Cattle Plague, illustrated by Drawings of the Characteristic Alterations of the Intestinal Follicles.

C. B. RADCLIFFE, M.D. (London): A few words concerning Bantingism.



EDWARD SMITH, M.D., F.R.S. (London): Some Questions in reference to the Nourishment of the Working Classes.

T. WATKIN WILLIAMS, *General Secretary*.

13, Newhall Street, Birmingham, July 28th, 1864.

### BATH AND BRISTOL BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Mineral Water Hospital, Bath, on Thursday, July 7th, at 4.30 P.M. The chair was taken by F. K. Fox, M.D., President. There were also present: Drs. Brittan (Clifton), Coates (Bath), Davey (Northwoods), Falconer (Bath), C. H. Fox (Brislington), E. L. Fox (Clifton), Herapath (Bristol), Marshall (Clifton), Tunstall (Bath); and Messrs. Bartrum (Bath), Bush (Bath), Collins (Chew Magna), Fowler (Bath), Harper (Batheaston), Leonard (Bristol), Mason (Bath), Mayor (Bristol), Prichard (Clifton), Spender (Bath), Stone (Bath), and Walker (Shepton Mallett); together with Dr. Boyd of Wells and Mr. Hudson of Shepton Mallett as visitors.

The minutes of the last meeting were read and approved.

*New Member.* Walter Harris, M.D., was proposed and elected a member of the Association and Branch.

Dr. F. K. Fox, after making a few remarks, resigned the chair, and introduced his successor, R. WILBRAHAM FALCONER, M.D., who read an address, which has been received for publication.

*Report of Council.* The Bath Secretary (Mr. FOWLER) read the following report:

"The Council has much pleasure in being able to congratulate the members on the still increasing prosperity of this Branch of the British Medical Association.

"Twenty-three new members have joined the Branch during the past year; whereby, after deducting the losses by removal and other causes, there is a total increase of thirteen members; thus raising the numbers of the Branch to 143, and entitling it to an additional representative at the General Council of the Association.

"The Council much regret that there have been several losses by default in paying up arrears of subscriptions; and would here urge upon all members the great importance of paying their subscriptions at an early period of the year. By this means, the Secretaries' work is much lightened, and any application from the General Secretary avoided.

"In consequence of the resolution passed at the last annual meeting, the number of ordinary meetings during the past season was increased from four to six; and your Council are happy to report that the attendance has maintained its average as to numbers, and on every occasion there has been a larger number of papers offered than could be read in the allotted time. The best thanks of the Branch are due to those gentlemen who have given so much time to the preparation of the twenty-five papers which have been read during the season. The following are the subjects of the papers.

"1, 2, 3. Spasmodic Affections of Children. 1. Pertussis; 2. Laryngismus Stridulus; 3. Chorea. By E. L. Fox, M.D.

"4. Nature and Treatment of Non-Syphilitic Psoriasis. By J. K. Spender, Esq.

"5. Case of Congenital Deformity of Foot. By A. Prichard, Esq.

"6. Case of well marked Wasting Palsy; Patient shown. By R. W. Falconer, M.D.

"7. Case of Obscure Brain-Affection. By F. Brittan, M.D.

"8. Case of Malformation of Temporal Bone. By C. Leonard, Esq.

"9. Operation for Artificial Anus. By G. Corbould, Esq.

"10. Instances of Recovery from Leucocythæmia. By S. Martyn, M.D.

"11 and 12. Hospital Dietaries. By J. Beddoe, M.D.

"13. Case of Tetanus. By R. W. Falconer, M.D.

"14. Case of Ovariectomy. By W. Mitchell Clarke, Esq.

"15. Criminal Responsibility in Relation to Insanity. By J. A. Symonds, M.D.

"16. The Plea of Insanity. By J. G. Davey, M.D.

"17. The Presence of Indigo in Purulent Discharges. By W. B. Herapath, M.D.

"18. Notes of a Case of Entire Avulsion of the Scalp; with Recovery. By J. W. Teale, Esq.

"19. Case of Separation of Epiphysis of Tibia, simulating Dislocation of Knee. By J. W. Teale, Esq.

"20. Discussion on Scarlatina, led by R. W. Falconer, M.D.

"21. Hour of Death in Different Diseases. By A. Haviland, Esq.

"22. Note of a Case of Tapeworm. By G. Burder, M.D.

"23. Case of Ovariectomy. By H. Marshall, M.D.

"24. Case of Diseased Humerus. By C. Steele, Esq.

"25. Cases illustrating the Effect of Suppurative Inflammation of the Dental Periosteum. By C. Gaine, Esq.

"Your Council can refer with great satisfaction to the General Meeting of the Association at Bristol in August 1863; the success of which was in great measure to be attributed to the admirable arrangement and hospitable reception of the valued President, Dr. Symonds, who was so ably assisted and supported by his Bristol colleagues.

"Your Council regret that, during the past year, more attention has not been paid to the claims of the medical officers of the Army and Navy, and that the grievances of which they have so long complained are still unredressed; and they will gladly avail themselves of any opportunity of bringing before the proper authorities their present anomalous condition; in furtherance of which, your Council recommend the adoption of a memorial to the Secretary of State for War, similar to that presented by the Metropolitan Counties Branch.

"The Council desire to recommend to the members of the Branch a more liberal support of the Medical Benevolent Fund and the Royal Medical Benevolent College, which valued institutions extend their benefits to any suffering members of their profession; and there are, at this moment, several former members of the Branch, or their children, recipients of, or candidates for, their bounty.

"The financial statement shows a very small balance in hand.

| RECEIPTS.                          |    |       | EXPENSES.   |    |       |
|------------------------------------|----|-------|---|----|-------|
| <i>Bath Branch:</i>                | £  | s. d. | <i>Bath Branch:</i>   | £  | s. d. |
| Balance in hand, Jan. 1, 1863..... |    | 2 0 5 | Hire of Rooms.....  | 2  | 10 0  |
| Subscriptions, 1863.....           | 6  | 10 0  | Secretary's Travelling Expenses to Birmingham (three journeys)..... | 4  | 17 6  |
| <i>Bristol Branch:</i>             |    |       | Printing and Stationery.....  | 2  | 7 6   |
| Balance in hand, 1863.....         | 5  | 15 9  | Stamps.....   | 1  | 6 6   |
| Subscriptions.....                 | 9  | 10 0  | <i>Bristol Branch:</i>  |    |       |
|                                    |    |       | Hire of Rooms.....  | 3  | 1 0   |
|                                    |    |       | Stamps.....   | 2  | 19 1  |
|                                    |    |       | Stationery.....   | 1  | 1 6   |
|                                    |    |       | Printing.....   | 1  | 17 0  |
|                                    |    |       | Gratuities.....   | 0  | 5 0   |
|                                    |    |       | Balance in hand.....  | 0  | 19 11 |
|                                    | 23 | 16 2  |   | 23 | 16 2  |

"The following gentlemen have been elected to fill the vacancies in the local Councils: *For Bath*—Messrs.

Bartrum, Stockwell, Church, and Dr. Tunstall: *For Bristol*—Mr. Smerdon, Dr. Davey, Mr. Leonard, and Dr. Brittan."

Dr. HERAPATH moved, and Dr. F. K. Fox seconded, the adoption of the Report and Financial Statement, which was carried unanimously.

*Representatives in the General Council.* The members were called upon to elect by ballot seven representatives to the General Council of the Association. The following gentlemen were elected: J. S. Bartrum, Esq. (Bath); W. Budd, M.D. (Clifton); J. G. Davey, M.D. (Northwoods); R. W. Falconer, M.D. (Bath); F. K. Fox, M.D. (Bristolington); A. Prichard, Esq. (Clifton); and R. N. Stone, Esq. (Bath).

*The Army Medical Service.* Dr. TUNSTALL moved, and Mr. PRICHARD seconded—

"That it is advisable to adopt the memorial to the Secretary of State for War, as prepared by the Council of the Metropolitan Counties Branch."

The motion was unanimously carried; and the memorial sent round for signature.

*Resolutions.* Dr. Fox proposed, and Mr. PRICHARD seconded, the nomination of Dr. F. Brittan as President-elect; which was carried unanimously.

Dr. BRITTON proposed, and Mr. BARTRUM seconded, a vote of thanks to Dr. F. K. Fox, the retiring President, for his able conduct in the chair, and for his generous hospitality during the past year.

Dr. HERAPATH proposed, and Dr. E. L. Fox seconded, a vote of thanks to the Council.

Mr. J. S. BARTRUM moved, and Dr. TUNSTALL seconded, a cordial vote of thanks to the Secretaries.

Dr. DAVEY proposed, and Mr. SPENDER seconded—"That the Secretaries be requested to continue their services for the ensuing year."

Dr. HERAPATH proposed a vote of thanks to Dr. Falconer, the President, for his able address; which was carried by acclamation; as was also a vote of thanks to the President of the Mineral Water Hospital, for the use of the board-room.

*Dinner.* The members then adjourned, and twenty-seven sat down to an excellent dinner.

#### LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

THE twenty-eighth annual meeting of the Lancashire and Cheshire Branch took place in the Town Hall at Lancaster, at twelve o'clock at noon, on Wednesday, June 29th, 1864; E. D. DE VITRÉ, M.D., President in the chair. There were also present: Drs. Dighton (Clapham); W. Hall (Lancaster); McNicoll (Southport); W. Roberts (Manchester); H. Simpson (Lyynn); A. Stookes (Liverpool); A. T. H. Waters (Liverpool); M. A. E. Wilkinson (Manchester); and Messrs. Broadhurst (Lancaster); G. Daglish (Wigan); O. Dickinson (Middleton); T. Howitt (Lancaster); C. Johnson, jun. (Lancaster); J. P. Langshaw (Lancaster); E. Lund (Manchester); G. Mallett (Bolton); T. Mather (Ashton-in-Makerfield); T. Mellor (Manchester); G. Southam (Salford); T. Turner (Manchester).

A luncheon was provided for the members in the Town Hall.

In the absence of the retiring President, Dr. Vose, G. SOUTHAM, Esq., took the chair and introduced the President, Dr. De Vitré, who delivered an address, which will be published in the JOURNAL.

*Report of Council.* Dr. W. ROBERTS, Honorary Secretary, read the following Report:—

"In presenting their Annual Report, the Council have to congratulate the Branch on its continued prosperity. The number of members is 217, which is a slight increase in the number for last year. Several

members have been lost during the past year from death and other causes; but these have been more than counterbalanced by an accession of new members.

"With regard to the proceedings of the Branch during their year of office, the Council have to report that the principal feature has been the delivery of the first course of lectures instituted in the previous year. The course consisted of three lectures which were delivered by Dr. A. T. H. Waters, at the Medical Institution, Liverpool. The average attendance at the lectures was large; and in every respect they may be regarded as having been eminently successful.

"The Council regret to say that they have not succeeded in providing a lecturer for the present year; but they hope to be able, in due time, to announce a second course to be delivered in Manchester in 1865.

"A communication has been received from the Secretary of the Metropolitan Counties Branch, enclosing a memorial to be presented to the two Houses of Parliament, to the Prime Minister, the Secretary and Under-Secretary for War, the Commander-in-Chief and the Director-General of the Army Medical Department, calling attention to the disadvantageous position at present occupied by the Surgeons and Assistant-Surgeons in the Army. The memorial calls attention especially to the practical nullification of the Warrant of 1858, which materially ameliorated the position of these officers; and the deleterious effects of the Warrant of 1863, which placed the Army Medical Officers in a position of inferiority to their military brethren of equal grade. In consequence of this injustice an injury had been inflicted on the medical service of the country. So loth were members of the medical profession to enter the service, that there were few candidates although there were about two hundred vacancies to be filled up. And, as was lately shown by Dr. Parkes, a considerable proportion of the few candidates who applied for admission, were men of such inferior attainments, that it was impossible to admit them. The memorial prays for a redress of the various grievances of the army medical officers; and the Metropolitan Counties Branch, at their last meeting, passed a resolution inviting the co-operation of the other branches of the Association with a view of bringing about this desirable object.

"A resolution will be submitted to the meeting, empowering the President, on behalf of the Branch, to sign a memorial of a like character to be presented in the same quarters.

"In accordance with the new law passed at the Annual Meeting two years ago, five members of the Council retire annually in rotation. The names of the gentlemen who retire this year are:—Dr. Turner (of Stockport), Mr. Halkyard, Dr. McIntyre, Mr. Mallett and Mr. Mellor. All these gentlemen are eligible for re-election.

*Financial Statement.* From the financial statement it appears that the balance in hand at the date of the Annual Meeting last year was £20:4:9; subscriptions received since £25:7:6; making a total of £45:12:3. The ordinary expenses of the Branch during the past year have been £21:18:9; leaving a balance in the hands of the Secretary of £23:13:6."

*Resolutions.* The following resolutions were passed:

1. Moved by Dr. McNICOLL (Southport), and seconded by Mr. O. DICKIN (Middleton)—

"That the Report of the Council now read be adopted and printed, together with the Proceedings of this Meeting."

2. Moved by Dr. EASON WILKINSON (Manchester), and seconded by Dr. SIMPSON (Lyynn)—

"That the best thanks of the meeting be given to



Dr. Vose, the late President; to Dr. Turner, the late Vice-President; to the Honorary Secretaries; and to the other members of the Council; for their services during the past year."

3. Moved by Mr. LUND (Manchester), and seconded by Dr. E. WATERS (Chester)—

"That the next meeting of the Branch be held in Manchester; and that T. Turner, Esq. (Manchester), be appointed President-elect; and T. Mellor, Esq. (Manchester), and A. Stookes, M.D. (Liverpool), be appointed Vice-Presidents elect."

4. Moved by Mr. T. HOWITT (Lancaster), and seconded by Mr. MELLORE—

"That the following gentlemen be appointed Local Secretaries for the ensuing year: W. H. Manifold, Esq. (Liverpool); J. Sharp, Esq. (Warrington); and C. Johnson, jun., Esq. (Lancaster)."

5. Moved by Mr. LANGSHAW (Lancaster), and seconded by Dr. W. HALL (Lancaster)—

"That the following gentlemen be appointed representatives of the Branch on the General Council of the Association: T. Howitt, Esq. (Lancaster); W. H. Manifold, Esq. (Liverpool); T. Mellor, Esq. (Manchester); H. Simpson, M.D. (Lynn); G. Southam, Esq. (Manchester); A. Stookes, M.D. (Liverpool); J. Vose, M.D. (Liverpool); E. Waters, M.D. (Chester); A. T. H. Waters, M.D. (Liverpool); Eason Wilkinson, M.D. (Manchester); and the Honorary Secretary, W. Roberts, M.D. (Manchester)."

6. Moved by Dr. ROBERTS, and seconded by Mr. C. JOHNSON, jun.—

"That the following twenty gentlemen be elected members of the Council of the Branch for the ensuing year: W. T. Callon, M.D. (Liverpool); T. Davies, M.D. (Chester); L. E. Desmond, M.D. (Liverpool); J. Dickinson, M.D., (Liverpool); R. Flint, Esq. (Stockport); John Harrison, Esq. (Chester); C. Johnson, jun., Esq. (Lancaster); E. Jones, Esq. (Liverpool); F. F. Lallemand, Esq. (Macclesfield); J. P. Langshaw, Esq. (Lancaster); E. Lund, Esq. (Manchester); G. Mallett, Esq. (Bolton); P. McIntyre, M.D. (Liverpool); D. H. McNicoll, M.D. (Southport); D. Noble, M.D. (Manchester); A. Ransome, M.B. (Bowdon); J. Sharp, Esq. (Warrington); Lawrence Spencer, M.D. (Preston); A. B. Steele, Esq. (Liverpool); and T. Turner, Esq. (Manchester)."

7. Moved by Mr. SOUTHAM, and seconded by Mr. LUND—

"That this meeting is of opinion that the diminution in the number of applicants for the medical appointments in the army has arisen from the unsatisfactory nature of the existing regulations respecting the duties, status, promotion, and remuneration of the army medical officers, and from a want of confidence in the good faith of the military authorities in consequence of the practical departure by the executive from the Warrant of 1858.

"That this resolution be embodied in a memorial, and signed by the President of this Branch on behalf of the meeting, to be presented (as a petition) to the Houses of Legislature, to the Commander-in-Chief, and the Director-General of the Army Medical Department."

8. Mr. MALLETT and Dr. E. WATERS called attention to the grievances of the Assistant-Surgeons in the Navy; especially with reference to the neglect of the authorities in providing them with cabins. On their motion, and after considerable discussion, the following resolution was unanimously agreed to:

"That the President of the Branch in co-operation with the Council be empowered, if on consideration deemed desirable, to memorialise the legislature and the authorities for a redress of the grievances of the naval assistant-surgeons, more particularly in regard to the neglect of the orders of the Admiralty as to

providing naval assistant-surgeons with separate cabins."

*Communications.* The following communications were made:

1. On a remarkable Case of Cancer. By E. Waters, M.D., read on behalf of Dr. A. Ransome.

2. Prostatic Calculi passed spontaneously by the Urethra. Exhibited by W. Roberts, M.D.

3. Observations on the styptic powers of Ergot of Rye. By T. Turner, Esq.

4. Case of Double Dislocation of the Shoulder-joint. By C. Deighton, M.D.

*Votes of thanks* were passed to the contributors of papers and communications; and to the Mayor for the use of the Town Hall on the occasion.

*Dinner.* The members, to the number of thirty, dined at half-past five, at the North Western Hotel, Morecambe. The President, Dr. De Vitre, presided, supported by the Rev. Canon Turner, Rev. Dr. Hathornthwaite, and other principal guests. T. Howitt, Esq., the Vice-President, occupied the vice-chair. After the usual loyal and patriotic toasts had been appropriately put from the chair, Mr. Turner proposed "Prosperity to the Lancashire and Cheshire Branch of the British Medical Association." Mr. Southam responded. Dr. Hathornthwaite, in an eloquent speech, proposed "Prosperity to the British Medical Association" coupled with the name of Sir Charles Hastings. Other toasts followed; and the company broke up at nine o'clock.

#### READING BRANCH: ANNUAL MEETING.

The annual meeting of the Reading Branch was held at the George Hotel, Reading, on Wednesday, July 20th; I. HARRINSON, Esq., President, in the chair.

*President's Address.* The PRESIDENT delivered an address, reviewing the more recent improvements in medical science; and was requested to publish it in the JOURNAL.

*Officers.* The following officers were elected: *President-elect*, N. Crisp, Esq. (Swallowfield); *Representative in the General Council*, R. T. Woodhouse, M.D. (Reading).

*Consultation with Homœopaths.* Mr. G. MAY, jun., proposed, and Dr. COWAN seconded, the following resolution, which was carried unanimously.

"That the members of this Branch pledge themselves, neither to meet in consultation, nor to attend patients in conjunction with, homœopathic practitioners.

"That no member of this Branch will meet in consultation any member of the profession who knowingly violates this resolution."

In introducing this resolution, Mr. MAY observed that, in 1858, the medical practitioners of Reading signed a resolution, pledging themselves not to meet a homœopath in consultation; that one of the subscribers to this resolution had recently broken his pledge; and that it had, therefore, become expedient to enable the Branch to deal with any future similar offence.

*Retrospective Address.* Mr. FRANK WORKMAN of Reading then read an abstract of the cases presented to the Reading Pathological Society during the past twelve months, ably commenting on the many facts of interest presented during that period. The address will be published in the JOURNAL.

*Dinner.* The members afterwards dined together at the George Hotel, and spent a most agreeable evening, under the presidency of I. Harrinson, Esq.

## Reports of Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 14TH, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

SEBACEOUS TUMOURS IN THE EXTERNAL AUDITORY MEATUS. BY JOSEPH TOYNBEE, F.R.S.

AFTER reference to the eighteen cases (published in the forty-fourth volume of the Society's *Transactions*, in which sebaceous tumours developed in the external auditory meatus had caused disease of the petrous bone, the author detailed two additional cases of the disease in which death resulted from irritation of the brain produced by the presence of sebaceous tumours. In one case—a girl aged 16—there was no history of any previous affection of the ear; nevertheless, there was caries of the petrous bone, and death ensued from inflammation and softening of the brain. In the eighteenth case—that of a boy also 16 years of age—acute symptoms suddenly came on without any warning, and death followed eight days after his admission into hospital from inflammation of the brain.

PROGRESSIVE ATROPHY OF THE TONGUE AND MUSCLES OF SPEECH; SUBSEQUENT LOSS OF POWER; GREAT GENERAL ATROPHY; POSTMORTEM APPEARANCES. BY EDGAR BARKER, JUN., M.R.C.S.

Since the publication in the *Medico-Chirurgical Transactions* in 1851, by Dr. E. Meryon, no other case of this description had been brought before the notice of the Society. The subject was a gentleman, aged 51, who had enjoyed excellent health till May 1859, when a slight difficulty of speech, accompanied by general failure of health and strength, induced him to seek medical advice. These symptoms, without any apparent cause, with the addition of impairment of deglutition, continued to increase; and on the following September, after some months' residence at the sea-side, the tongue had assumed the following appearance; small and shrunken, it lay low in the floor of the mouth, and over its whole surface was noticed an unceasing tremulation of the fibrils of its muscular structure; it had lost its bright healthy hue, and was of a pale-yellow colour. His face had also lost its ordinary expression; the cheeks and lips were flaccid, and hung down. Saliva frequently dribbled from the mouth. No symptom whatever of irritation of brain or spinal cord was ever present, but the muscular tissue in different parts continued to waste and degenerate with unrelenting pertinacity. Gradually articulation became unintelligible, and deglutition impossible. The fibrillary tremors, so noticeable during the wasting of the muscles, ceased with their destruction. From the tongue to the muscles of deglutition, thence to those of the upper and from these to the lower extremities, the disease extended. At length the intercostals were affected; and the breathing consequently at times became much laboured, as each morning brought increasing difficulty in the necessary expulsion of mucus collected in the bronchial tubes during the previous night. Great exhaustion followed these attacks, and on the morning of October 15th, 1861, he gradually sank.

Various remedies had been for many weeks together tried, but none seemed in any way to arrest the steady onward progress of the disease. Cod-liver oil, quinine, iron in various forms, zinc, strychnia, and the constant use of galvanism, were the principal agents employed.

The tongue in its entire extent had been converted

into a soft, pale-yellow mass of fatty tissue. The papillæ were shrunken, and most of its muscular fibres were replaced by oil-globules, amidst which granular and fat-laden fibres were scattered; and of the muscles attached to the tongue, only the genio-hyo-glossi and stylo-hyo-glossi retained any manifest traces of their form and structure. The nerves of the tongue, so far as traceable, were natural; the muscular fibres in the arches of the palate and in the uvula were chiefly natural. The same granular appearance was noticed in the pectoralis major, in a portion of the left ventricle of the heart, and in the left side of the diaphragm. In all, the muscular fibre was in great part natural, though each specimen in an equal degree contained stray fibres, which were losing the clearness of their transverse markings, and becoming granular with fatty deposit. The examination, worked out with the greatest care and by accurate observers, failed to bring satisfactory evidence of any change in the nervous tissue supplying the affected muscles, either in their centre or peripheric extremities; but, on the contrary, the examination tended to strengthen the present prevailing opinion that the disease is essentially in the muscular tissue itself, and must yet be looked upon as akin to that condition frequently met with in the left ventricle of the heart, and known as fatty degeneration.

ON THE TREATMENT OF STRICTURE OF THE URETHRA BY SUBCUTANEOUS DIVISION. BY HENRY DICK, M.D.

[Communicated by WILLIAM ADAMS, Esq.]

In the year 1853, Dr. Dick published his first case in the *Medical Times and Gazette*, and in 1855 he sent a memoir to the Académie de Médecine de France, in which two other successful cases are related. Since that time, Mr. W. Adams and Dr. Dick's colleague at the National Orthopædic Hospital—Mr. Allingham—had operated after the same method with the best result. Dr. Dick divided strictures into two classes, after their physical properties—dilatable and non-dilatable. Stricture might occur at any spot of the urethra; but most frequently at the bulb. They were less frequent at the fossa navicularis and the membranous portion. Stricture was the result of inflammation, a new tissue of fibrous nature being formed at the strictured spot. The greatest number of strictures were atrophic; but a few had the hypertrophic form. Dr. Dick pointed out that every portion of the stricture must be divided, because if only the narrowest part were divided symptoms of stricture would return. He further believed that the back opening of the stricture did not correspond with the front opening; and that these pathological changes were the result of post-inflammatory retraction. Dr. Dick believed dilatation by the graduated metallic bougies to be the safest method; but there were cases where dilatation would not give much relief to the patient, or sometimes social exigencies urged the patient to get radically cured. The different methods employed he divides into three: 1, cauterisation; 2, splitting or tearing; 3, cutting strictures. The cutting he subdivided into three kinds—the internal, the external, and the subcutaneous methods. He thought cauterisation the most objectionable, having regard to the pathological anatomy of strictures. Splitting he only admitted in a few exceptional cases—where division by the knife could not be practised with safety, where a number of strictures were closely following each other, or where a large part of the urethra was strictured; but even in these there was no certainty if the stricture had been really torn or only forcibly dilated. He cited two cases of sudden death occurring after splitting. His other objection to splitting was that the pain was so violent that recourse must be had to chloroform. Besides it was a principle in sur-



gery never to tear parts when they could be cut with safety. Dr. Dick thought the internal incision the most logical, having regard to the pathological anatomy of strictures; but its execution had great drawbacks; he alluded to the difficulty of making the cut at the right spot with the instruments. Incisions with those cutting machines were very difficult to execute, as very often the knife acted as a dilator instead of a cutting instrument when the part was not tensely dilated. He objected to the external incision as being almost as hazardous an operation as cutting for stone. The suppuration afterwards was so long, consequently pyæmia was much to be apprehended; besides, the long suppuration was very likely to occasion great retraction, some cases of which had come under his own observation. The subcutaneous division he believed to fulfil the indications of the pathological anatomy. The surgeon could attack directly with the knife the contracted spots. He was at liberty to make his subcutaneous cut as long and as deep as he thought most suitable for the occasion. The external puncture healed in the first twenty-four hours. The operation had further the advantage that chloroform was not required, the pain being very trifling; the hemorrhage, too, was insignificant. The subcutaneous method was indicated not only in severe strictures where dilatation could not be practised, but also, in his opinion, in elastic strictures which returned after dilatation. Dilatation must first be practised to a small extent, to enable the operator to pass a small-grooved conductor through the stricture. No chloroform was used; and the patient's regimen was not changed. In winter Dr. Dick confined his patient to his room for eight days; in summer only for three days. For the operation the patient was placed in the position for lithotomy. The instruments used were a grooved conductor, which was shown to the Society; an ordinary tendon-knife, which for strictures in the membranous portion should have rather a long neck, and be a *tenotome caché*; a good sized catheter in proportion to the orifice of the urethra; a T-shaped bandage, an ordinary bandage, sticking-plaster, and lint. No bandages were required for strictures in the membranous portion; in these cases a large metallic bougie was left in the urethra after the operation. The patient being placed in position, the conducting catheter was introduced until the two knobs stopped before the stricture; then the surgeon, by skilful manipulation, slid out the small grooved conductor (which was concealed in the conducting catheter) through the stricture. The conducting instrument being then in position, the surgeon delivered it into the hand of his assistant, telling him to keep it gently but steadily against the stricture. He then felt outside the urethra for the two small knobs, grasped with his left hand the penis with the instrument, and placed his thumb just before the knobs, having his index and middle fingers at the back of the penis; he then took the tenotome in his right hand, and thrust it between the two knobs, pushing it resolutely through the stricture, and divided it in that *sawing* manner in which usually tendons and fibrous tissues are divided. Dr. Dick thought the cut should always be from three-quarters of an inch to an inch long; also that the knife should not be withdrawn until the surgeon was quite convinced that the stricture is completely divided. The conducting catheter was then withdrawn, and lint and sticking plaster placed on the external wound, and the whole kept in position by a T-shaped bandage, a common roller, and a few pins. The patient was then put to bed, and his urine drawn off twice or thrice a day when required with a large catheter. Dr. Dick strongly objected to leaving a catheter in the urethra after the operation. He quoted four

cases of his own and two of Mr. Allingham's, all of which were attended with the most successful results. In them shivering always took place, but no bad results followed. The only case in which shivering did not occur, was after incision in the fossa navicularis. Another point of importance on which he dwelt was that dilatation with a large metallic bougie should be practised once a week for six months after the operation.

CASE OF TRAUMATIC STRICTURE IN THE ANTERIOR PORTION OF THE URETHRA, CURED BY SUBCUTANEOUS DIVISION. BY W. ADAMS, F.R.C.S.

As a note appended to the above paper by Dr. H. Dick, Mr. ADAMS gave the particulars of a case of traumatic stricture in the anterior portion of the urethra, which he had cured by dividing the stricture subcutaneously in the manner proposed by Dr. Dick; the operation very much resembling subcutaneous tenotomy.

In June 1862, C. W., aged 26, an officer in the army, first consulted Mr. Adams on account of a very severe stricture, of the annular or ring-like form and gristly substance, situated in the anterior portion of the urethra, two inches and a quarter from the external orifice. The stricture, which could easily be felt by external examination, had been caused by the bite of a horse in India a year and a half previously, and the inconvenience now suffered by the patient incapacitated him for military duty. At the time of the accident both the scrotum and penis were much injured; profuse hæmorrhage from the urethra occurred, and a portion of the mucous membrane is said to have protruded from the external orifice. Abscess formed and opened externally close to the frenum, where a fistulous opening communicating with the urethra remained at the date of Mr. Adams's operation. Ever since his recovery from the immediate effects of the injury, the patient had been obliged to wear, night and day, a short catheter of small calibre (about No. 2); the disposition to contraction being so great that if this were discontinued more than a few hours, he had the greatest difficulty in passing a tube even of less diameter than a No. 1 catheter. Mr. Adams considered that an operation offered the only means of permanent cure; but at the patient's request this was postponed, and gradual dilatation tried by a graduated series of short silver catheters. The patient left town, and persevered in this treatment for eight months, wearing a catheter day and night. Dilatation could not be carried further than to admit a No. 4 catheter, which was habitually worn, when Mr. Adams was again consulted in February 1863. The disposition to contraction was so great that when the No. 4 catheter was left out during the night, only a No. 1 or No. 2 catheter could be passed in the morning. Mr. Adams now urged an operation; and, thinking that any attempts at forcible dilatation, such as Mr. Holt had recommended, would probably fail in consequence of the large size and unusual gristly induration of the stricture, determined to adopt the subcutaneous division of Dr. Dick, more especially as he had assisted Dr. Dick in two operations of this kind in severe cases, in both of which the operation had been eminently successful.

On March 16th, 1863, Mr. Adams performed the operation, with the assistance of Dr. Dick. The instruments used were the tenotomy-knife, and Dr. Dick's grooved staff with a bulbous extremity, having within it a smaller grooved staff, which can be passed through the stricture, and form a director, along which the knife can be passed in dividing the stricture, when the bulb of the larger staff has been passed down to the stricture as a guide for the introduction of the knife. In performing the operation, the teno-

tony-knife was passed through the skin externally, directly into the groove in the bulb of the larger staff, and thence onwards along the groove in the smaller staff through the stricture; then, leaving the groove, the knife was directed outwards towards the skin, dividing freely the stricture and some of the corpus spongiosum a little above and below it. In the present case no difficulty occurred in the operation; but, as a complication, two other strictures were discovered by the bulb of the larger staff—one an inch and a half from the external orifice (*i.e.*, nearly an inch anterior to the main stricture), and the other more than an inch behind the main stricture; so that in order to divide these, it was necessary to introduce the tenotomy knife in two different places. When the main stricture was divided, the tissue gave way very much like a tightly-stretched tendon, and could be both heard and felt.

Immediately after the operation, in which very little hæmorrhage occurred, a No. 12 (English) catheter was passed into the bladder without any difficulty, and left in for a short time, slight pressure on the penis being kept up. The catheter was not left in during the night. The next day a No. 12 catheter was introduced twice, and the urine drawn off. This was continued day after day two or three times, and on the fourth day the patient was indiscreet enough to walk down to his club and dine with some friends. Not feeling so well afterwards, he remained two days in-doors. On the eighth day he went out of town. He was able to pass a No. 10 catheter for himself without any difficulty, and this he was directed to do at first twice and then once a day. The number 12 catheter seemed to meet with a little obstruction at the seat of the deepest stricture, or a little beyond this, but passed readily through the situation of the main stricture. On April 15th, the patient was carefully examined by Mr. Adams, and no disposition to recontraction existed. He was improved in every respect. On June 8th, less than three months from the date of the operation, Mr. Adams reported this gentleman as fit for active military duties. He was now directed to continue passing the No. 10 catheter twice a week, and then once a week, which was to be gradually discontinued.

## OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 4TH, 1864.

H. OLDHAM, M.D., President, in the Chair.

Four gentlemen were elected Fellows of the Society.

*Specimens.* Dr. BARNES exhibited a small Fibroid Tumour of the Uterus spontaneously expelled from a patient who had suffered from metrorrhagia.

Dr. GREENHALGH communicated the result of the case of Amputation of the Cervix Uteri mentioned at the last meeting. The patient died some days after the operation, of peritonitis.

Dr. BARNES observed that Dr. Marion Sims's method of removing the cervix uteri was superior to the operation by the *écraseur*, the surface left denuded being smaller, and the risk of peritonitis probably less.

Dr. FUSSELL, of Brighton, exhibited the Uterus of a patient who had died five days after removal of a Cancerous Tumour from the Cervix Uteri. The interior of the uterus was found diseased, and there were also fibroid tumours in the uterine parietes.

Dr. ROUTH stated, in the course of a discussion which arose on the merits of different *écraseurs*, that he had found by experiment that the wire-rope *écraseur* cut through the tissue of the cow's uterus more readily than the chain *écraseur*.

Dr. GRAILY HEWITT exhibited an entire Ovum of

Seven Months' Development, which had been forwarded to him by Dr. Whitmarsh, of Hounslow. The ovum had been expelled ten days after symptoms of labour had set in.

## ON THE APPLICATION OF EXTREME COLD AS AN ANODYNE IN THE PAIN ATTENDANT ON PARTURITION.

BY J. MORTIMER GRANVILLE, L.R.C.P., LOND., BRISTOL.

An examination of the phenomena of labour, more especially in relation to the nature, duration, and intensity of the pain accompanying it, led the author to the following conclusions:—1. The actual pain (as distinguished from the sensation of forcing) experienced by the parturient woman bears no definite proportion to the force and efficiency of what (for want of a better name) we term "the pains" of her labour. 2. The sensation of pain is not invariably synchronous with the occurrence of uterine contraction, the effects of the latter being perceptible to the accoucheur not unfrequently, during examination, before his patient experiences the former.

From these circumstances, taken in connection with others well known to careful observers, it might be inferred, that the pain attendant on labour is more directly related to the effects of uterine contraction (perhaps mechanical force operating on nervous tissue) than to the specific muscular act itself.

The reference of the pain to some region more or less remote from the contracting uterus or the dilating external passages (in which the seat of pain might have been supposed to be located) appears to support the last inference; whilst it clearly points to the conclusion, that the pain attendant on labour is neuralgic in its character.

Acting on this theory, the author had tried the effect of extreme cold as a topical anodyne, and the result had been very constant. The method was applicable in all cases, independently of the condition of the patient; cold being already in use as a powerful means of exciting the uterus to contraction in cases of extreme exhaustion. It was perfectly free from the dangers so inseparable from the most cautious use of anaesthetics. It was perfectly manageable, and might be safely confided to a nurse; and its *rationale* was in strict conformity with the well known principles of physiology. It was not intended to remove, but to alleviate, the pain attendant on parturition. The power of the uterine efforts was generally increased, without any corresponding increase in the attendant suffering; the patient being not unfrequently under the impression that the pain had ceased when the presentation continued to shew the continuance of the expulsive force. This had been very remarkable in some of the cases—the pains appearing to be shortened, when examination proved them to be prolonged. The actual pain was sensibly diminished, the patients expressing themselves variously, but to the general effect that they were relieved of half their suffering. The method of the application was of the greatest importance. The cold must be extreme, or it is of little if any service, and it must be persistent.

An apparatus was exhibited, consisting of a flat tin box, which was filled with a freezing mixture and applied to the seat of the pain.

Dr. OLDHAM believed some difficulty would be found in determining what was the seat of pain. Madame Boivin referred the pain during her own labours to the neck of the uterus.

## ON A NEW MODE OF TREATING CASES OF VESICO-VAGINAL FISTULA.

BY ALFRED MEADOWS, M.D.

It was contended in this paper, that the usual practice of keeping the patient in bed for two or three weeks after the operation for the cure of vesico-



vaginal fistula is unnecessary, and that, on the contrary, she may be allowed with perfect safety to go about as usual immediately after the operation. The author showed that the reason given for the former practice—viz., that the parts should be kept quiet, is as fully attended to in the plan suggested as in that usually followed, because the movements of the body do not interfere with the quietude of that particular portion of the floor of the bladder where the fistula existed, there being no muscles in this region which can by their attachments prejudicially affect the part in question. With regard to the second consideration,—that the urine should be kept from the surface of the fistula, either by the constant employment of the catheter or by its frequent use,—the author briefly reviewed the circumstances which exist after every operation of this kind. At first the bladder is quite empty, but, as urine gradually flows into it, the organ becomes slowly distended; and the very fact of this distension taking place by the uniform pressure of the urine, proves that contact of that fluid with every part of the bladder-wall cannot be avoided; no position of the patient can prevent it, and consequently the recumbent posture is not needed on this account, nor is the use of the catheter of any service. Two cases were detailed in which the plan here suggested by the author had been carried out with perfect success. In one, where chloroform was not administered, the patient went about immediately after the operation, and followed her usual avocations. In the other case, the patient had chloroform, and on this account chiefly she kept in bed that day; but the next day she was allowed to go out, and her cure was equally complete. In both cases the opening was large enough to admit the finger easily; and in one of them it was situate far in the vagina. The author recommended the use of many sutures, merely twisting them; and without either clamp or shot; he also advised that they should be allowed to remain some time to secure firm union, their presence occasioning no inconvenience. One of the cases cited was further remarkable inasmuch as by the process of sloughing which had previously taken place no trace of the uterus could anywhere be discovered, and the patient has continued for some time past to menstruate through the bladder.

Dr. OLDHAM thought it a great point to save patients from the irksomeness of wearing apparatus; and by showing that the confinement hitherto considered necessary was not required, Dr. Meadows had done good service.

#### CASE OF HYDRO-ENCEPHALOCLE.

BY A. HARRIS, M.D., CAMBORNE.

The subject of this case was the thirteenth child. A tumour hung from the back of the head at the upper part of the occipital bone; it measured nine inches round, and was four inches and a half long; it contained fluid. The day after birth, four ounces and a half of highly albuminous fluid were removed by a cannula and trocar. Two days later it was again punctured. Nine days later a spontaneous evacuation occurred. The child wasted gradually, and died when three months old.

#### DESTRUCTIVE INFLAMMATION OF THE HIP-JOINT IN A PUERPERAL WOMAN.

BY THOMAS W. NUNN, ESQ.

The patient was admitted into the Middlesex Hospital twenty-seven days after delivery of her second child, complaining of pain, swelling, etc., of the right hip. She had a patchy tongue, glazed fauces, and a pulse of 130. No inflammatory or other disease of the pelvic viscera. According to the patient's account, she suffered some *post partum* hæmorrhage, and for three weeks had offensive discharges. The

pain in the hip commenced nine days after delivery. The infant was suckled no longer than fourteen days. On the thirty-sixth day Mr. Nunn passed in deeply a narrow bistoury at the back of the trochanter, and gave exit to twelve ounces of pus. On the forty-fourth day rigors came on, and on the forty-eighth day death took place. The *post mortem* examination revealed most extensive denudation of the head of the femur, the cotyloid cavity, and neighbouring osseous structures; no invasion of the pelvis by matter through the thyroid foramen; the uterus and other pelvic viscera not visibly affected; in the lower lobe of the left lung a small solidified patch the size of a bean, with a yellowish softened centre. Joint disease the author believed was generally accepted to be one of the consequences of puerperal fever, and under such circumstance to be the result of pyæmia. The question was—Is there a liability to joint inflammation peculiar to the puerperal state independent of ordinary purulent infection characterised by an absence of acute constitutional symptoms? The author related a case by Dr. Fenwick, bearing on this point. He expressed a conviction that many analogous cases lay scattered over, and so to speak fossilised in, the experience of accoucheurs; and that it would be well, if his conviction should be justified by facts, that something more definite than is to be at present found in surgical text-books were made available to the student by these cases being brought to light. The obvious practical point was regarding the moment when an incision into the joint might justifiably be made, so as to relieve the system of the grave complication of pent-up matter.

Dr. MARTYN gave the particulars of an interesting case somewhat similar to Mr. Nunn's; the patient recovered, however, after an illness of many months' duration. The abscess should not, he believed, be opened. Rest was very important.

Mr. NUNN, in reply, said that it was curious to observe, in consulting various works, that the surgeons had apparently left the question of puerperal joint disease to the obstetricians, and that the obstetricians had tacitly relinquished it to the surgeons. A very important and highly interesting matter had thus, between the two, not received that elaboration which it required.

**SALICIN IN THE URINE.** Dr. Landerer has found that when salicin is administered in considerable doses it passes away in the urine unchanged, and can be easily separated from the evaporated urine by means of alcohol. (*Archiv. der. Pharm.*)

**WAR INCIDENTS.** We see it stated that Dr. Winchell was murdered recently by guerrillas, on the Mississippi, in the vicinity of Vicksburg. He leaves a wife, who, we believe, was riding with him at the time of his murder.—Died on Monday, May 16th, 1864, from a shot wound in the breast, received on the battle-field near Spottsylvania Court House, Dr. Thomas Jones, Surgeon of the Eighth Pennsylvania Reserves, in the thirty-second year of his age. When the first call was made for volunteers, he in the capacity of lieutenant started to defend the menaced capital of his adopted country. In the unfortunate riot in Baltimore he was severely wounded. He was in many of the most hotly contested battles of the war. When duty called he knew no fear. His time of service expired the day after he was wounded. For three long years he had endured exposure to the burning sun, the drenching rain, cold and heat, ever at his post ready to raise the fallen, and to succour the faint. Not only the bodies, but the souls of those committed to his charge received his anxious thought and attention.

## Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At a general meeting of the Fellows, held on Wednesday, July 20th, the following gentlemen, previously members of the College, were admitted Fellows of the same:—

Harley, George, M.D., 77, Harley Street  
Pollock, James Edward, M.D., 52, Upper Brook Street  
Priestley, William Overend, M.D., 17, Hertford Street, May Fair  
Wood, William, M.D., 54, Upper Harley Street

At the same meeting, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Jones, John Lewis, Carnarvon  
Jones, John Wickhiffe, Assistant-Surgeon Royal Navy  
Silva, Leo Charles da, Burstwood, Wandsworth  
Skinner, William, Sheffield  
Smith, Thomas Haywood, Alcester

The following gentlemen were reported by the examiners to have passed the first part of the professional examination for the licence:—

Bateman, Francis, St. Bartholomew's Hospital  
Bushell, Stephen W., Guy's Hospital  
Clothier, Henry, University College  
Cole, Thomas, St. Bartholomew's Hospital  
Cribb, Henry, Bishops Stortford  
Denne, Henry, Guy's Hospital  
Eccles, William S., St. Bartholomew's Hospital  
Ferris, John S., King's College  
Gill, John, Guy's Hospital  
Malin, George W., Sydenham College, Birmingham  
Robinson, Robert, St. Bartholomew's Hospital  
Rogers, George A., 14, Commercial Place, Commercial Road  
Rundie, Henry, St. Bartholomew's Hospital  
Simpson, Reginald P., 82, Gower Street  
Sims, Francis M. B., 8, Sackville Street  
Skinner, William, 8, Ampton Place, Gray's Inn Road  
Stuart, William A. P., University College  
Stuckey, John, University College  
Taylor, Theodore T., St. Mary's Hospital  
Welch, John B., King's College  
White, James A., Salford  
Willoughby, Edward F., University College

APOTHECARIES' HALL. On July 21st, the following Licentiates were admitted:—

Henderson, Roderick William, Lower Halliford, Middlesex  
Jackson, Richard, Birmingham  
Knepe, William Melville, Guy's Hospital  
Lucey, William Cubitt, Bermondsey  
Mason, Philip Brookes, Burton-on-Trent  
Rutledge, William Frederick, London Hospital  
Yates, William, 20, Richmond Green

At the same Court, the following passed the first examination:—

Denziloe, William Le Gros, St. Mary's Hospital  
Jones, William Griffith, Middlesex Hospital  
Land, William John, St. Mary's Hospital  
Murphy, Thomas Charles, University College Hospital  
Worthington, James Copland, Middlesex Hospital

### DEATH.

\*JONES, Charles, Esq., at Alton, aged 60, on July 25.

THE FRENCH SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS goes further than the English institution, by not only endeavouring to prevent its *protégés* from being cruelly treated, but by rewarding inventions tending to increase their comfort and well-being. At the last meeting of the Paris society, medals were given for a new form of horse-shoe for use in slippery weather, a saddle which is stated to be more comfortable than the ordinary form, a horse-collar having similar merits, a sieve for cleaning grain from dust and grit, trusses for the cure of hernia in young horses, and an apparatus for the more effectual aëration of the water in fish tanks during transport. (*Chemical News.*)

INDIAN MEDICAL SERVICE BILL. In the House of Commons, on Monday last, on the order for reading the Indian Medical Service Bill a third time, Mr. Hennessy moved that the order be discharged, on the ground that the bill would give the Secretary of State for India the power of returning to the old system of nomination, and substituting it for the competitive system, which Parliament and the country generally approved. Sir C. Wood explained that his object in introducing the measure was to obtain a better description of medical officers for the Indian service; and the bill would enable the Secretary for India to avail himself, for the benefit of the native forces, of such assistant surgeons as had entered the Queen's army upon public competition, and might subsequently volunteer for the Indian army. The bill was also opposed by Colonel North, Mr. Monsell, Mr. Lysley, Colonel Sykes, and Sir E. Colebrooke; and upon a division the motion of Mr. Hennessy was carried against the Government by 46 to 44. The bill was therefore lost.

SIR CHARLES LYELL. Her Majesty has been pleased to confer the dignity of baronet upon Sir Charles Lyell, by the title of Sir Charles Lyell, Baronet of Kinordy, in the county of Forfar. Sir Charles Lyell was educated at Exeter College, Oxford, where he graduated in 1821, and was subsequently called to the bar. Devoting his attention to scientific studies, in connection with geology, he was chosen president of the Geological Society in 1836, and again in 1850, having been knighted in 1848. His first important work, entitled *The Principles of Geology*, was published in 1833, and has reached a ninth edition. He also published *The Elements of Geology* in 1838, of which also several editions have appeared. In 1841, under the title of *Travels in North America*, he gave an interesting narrative of a visit paid to North America, for the purpose of examining the geological structure of that continent; and in 1845 he published the record of a *Second Visit to America*, in which the social aspects, as well as geological formation of the country, were fully discussed.

ST. THOMAS'S HOSPITAL. The Governors of St. Thomas's Hospital on Wednesday held a General Court. Mr. Adams noticed the very great disproportion of the medical and surgical staff to the number of patients, as compared with other hospitals. For example, Guy's Hospital contained 600 beds, and their annual surgical and medical expenses amounted to £2,000; while their own, for only 200 beds, were no less than £3,000. He also pointed out the extravagant allowances furnished to their apothecary, Mr. Whitfield, who during the year had 942 gallons of Barclay and Perkins' porter and 36 tons of coal. All these quantities were far beyond the requirements of any private gentleman. Their steward at present had a salary of £400, and £35 for coals and beer. He regarded Mr. Whitfield as the best paid official in Europe. He was in the receipt of £600 a year salary, besides £50 from the Nightingale Fund, and 8 per cent. on the receipts from pupils. In addition to all this, he had a house. During the last year, the patients had been supplied with no less than 1,336 dozen of soda-water and lemonade; during the past year, 600 patients at Guy's only consuming 260 dozen. These beverages were only used by fever patients; and he considered it impossible for them to consume 16,000 bottles of soda-water in twelve months. In the wine, brandy, and gin accounts, there were serious deficiencies. In wine, 95 gallons in 686 gallons; in brandy, 17 in 147; and in gin, 5 in 72. He did not think that, after laying these figures before them, they would say that this gentleman had looked after their interests. A motion, to the effect



that the grand committee should investigate the matter at once, was put and carried. Dr. Leeson begged to say a few words in defence of Mr. Whitfield. His family was twelve in number; and, if they divided the quantity of beer supplied among them, they would find it only amounted to about two pints per day per head. Mr. Deputy Elliott feared the public would blame the grand committee loudly for letting things run on so long. It really seemed as if the inquiry was being made only at the last possible moment, when a Government Commission had been appointed to inquire into the affairs of the hospital. Mr. Baggallay, the Treasurer, here rose, and announced his intention of resigning.

### OPERATION DAYS AT THE HOSPITALS.

**MONDAY.**.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

**TUESDAY.**....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

**WEDNESDAY.**...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

**THURSDAY.**....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

**FRIDAY.**.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

**SATURDAY.**....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

### MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

**MONDAY.** Entomological Society.

### TO CORRESPONDENTS.

\*. All letters and communications for the JOURNAL to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

**ASSOCIATION OF EDINBURGH GRADUATES.**—We have been requested to state that the inaugural dinner of the Association of Edinburgh Graduates will take place at the Freemasons' Tavern, on Aug. 1st, at a quarter past Six o'clock. A large number of graduates have already signified their intention of being present. Any graduate who intends to be present on the occasion, should signify his intention, as early as possible, to Dr. Murchison, Honorary Secretary, of 79, Wimpole Street. This Association promises to become a powerful body. We heartily wish a good development to an association of so excellent an *Alma Mater*.

**GRIFFIN TESTIMONIAL FUND.**—SIR: The following subscriptions have been further received on behalf of the above Fund:—James Hair, Esq. (Bures St. Mary), 10s. 6d.; C. F. J. Lord, Esq. (Hamstead), 10s. 6d.; Dr. R. Martin (Warrington), £1:1; Dr. Bisset Hawkins (Dorchester), £1:1; Dr. Wm. Sankey (Hollingbourne), £1:1.

Amount previously announced, £39:7:6. Received at the *Lancet* office, £2:1s.

I am, etc., ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.  
145, Bishopsgate Street Without, July 27th, 1864.

**COMMUNICATIONS** have been received from:—Dr. EDWARD D. DE VIERE; Dr. W. E. IMAGE; Dr. G. M. HUMPHRY; Dr. JAMES RUSSELL; Mr. HOLMES; Dr. PAGET; Mr. HORNBY; Dr. WILLIAM ANDERSON; Dr. J. G. PARSONS; Dr. DRYSDALE; Dr. NANKIVELL; Dr. FOWLER; Dr. LONGERAN; Dr. E. GOODEVE; Mr. THOMAS PAGET; Mr. WILSON; Mr. I. HARRISON; Mr. C. F. J. LORD; Dr. ORMEHD; Mr. T. P. TRALE, JUN.; Mr. G. MAY, JUN.; Mr. STONE; Dr. MURCHISON; Mr. C. F. HODSON; and Dr. RICHARDSON.

### SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears are paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. WATKIN WILLIAMS, General Secretary.

Birmingham, July 1864.

### ADVERTISEMENTS.

#### Mr. J. Baxter Langley, M.R.C.S.

(King's Coll., London), 50, LINCOLN'S-INN-FIELDS, W.C., respectfully solicits the attention of Medical gentlemen with means of investment at their command to the practices and partnerships which are placed in his hands for negotiation, many of which he is not authorised to advertise. No charge made to purchasers.

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without delay, free of expense to the Principals. No gentlemen recommended whose antecedents have not been inquired into. Apply to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

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Will shortly appear, the Jacksonian Prize Essay for 1863.

#### On Diseases of the Larynx. By

MORELL MACKENZIE, M.D., M.R.C.P.

#### The Queen's College, Birmingham.

HAM.—THE CHAIR OF MEDICINE, and the CHAIR OF ANATOMY, are now vacant. Candidates are invited to send in their applications, with Diplomas and Testimonials, to Mr. LAUNDY, Secretary, Paradise Street, on or before August 13th, 1864.

Extract from Charter:—"Whenever a vacancy shall occur in any Professorship, the names of the Candidates shall in the first instance be referred by the Council to the Professors, who shall make a special report to the Council of the names of the Candidates, as in their judgment shall be qualified and eligible, professionally and otherwise, to fill the vacant Professorship; and the Council shall then recommend to the Governors from the Candidates included in such report, one whom they think best qualified to fill the vacant Professorship."

Council Room, July 26th, 1864.

#### Leicester Infirmary.—There will

shortly be VACANCIES for TWO RESIDENT PUPILS in this Institution. Particulars may be obtained on application to the House Surgeon, at the Infirmary.

By order of the Board.

Board Room, July 19th, 1864.

T. A. WYKES, Secretary.

**To the Surgical and Medical Professions.—W. F. Durroch, Manu-FACTURER of SURGICAL INSTRUMENTS to the Royal Navy, Greenwich Hospital, Guy's Hospital, &c. &c.** begs to inform the Profession that he continues to manufacture SURGICAL INSTRUMENTS of every description, and that he has attained the highest reputation by the approval and patronage of the most eminent Practitioners and Lecturers for the improvements made in various articles. Gentlemen favouring him with their orders may rely on having their Instruments finished in the best and most modern style. Surgical Instruments made to Drawings and kept in repair. Established 1758.

**NOTICE OF REMOVAL.**—W. F. DURROCH has removed from No. 28, St. Thomas's Street East, to No. 3, St. Thomas's Street, near the Hospitals in Southwark. Late Manufacturer to the leading Houses in the Trade.

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"Sackville Street, Piccadilly, London. April 1862."

"CHAS. KIDD, M.D. and Surgeon."

Letter from ALFRED ASPLAND, Esq., F.R.C.S. Eng., J.P. Chester and Lancaster, Surgeon 4th Cheshire Batt. V.R., Surgeon to the Ashton Infirmary.—"After an extensive trial of your Chlorodyne in Hospital, Infirmary, and Private Practice, I am able to state that it is a valuable medicine. I have found its action peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections. I have never found it produce headache or feverish disturbance, results which not unfrequently occur from other forms of Chlorodyne. As a sedative to allay excitement arising from the abuse of intoxicating drinks, so commonly witnessed in our Barrack Hospital, I have been perfectly satisfied with it. Its known composition will doubtless prove an additional recommendation to the Profession."

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Manufacturer and Proprietor of these Preparations, A. P. TOWLE, 99, STOCKPORT ROAD, MANCHESTER.



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# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

THE

## PRESIDENT'S ADDRESS.

BY

GEORGE E. PAGET, M.D., F.R.C.P.,

PHYSICIAN TO ADDENBROOKE'S HOSPITAL, AND LINACRE LECTURER  
ON PHYSIC, CAMBRIDGE; MEMBER OF THE GENERAL MEDICAL  
COUNCIL; FORMERLY FELLOW OF CAIUS COLLEGE.

GENTLEMEN OF THE BRITISH MEDICAL ASSOCIATION,—My first duty is to thank you, which I do most heartily, for the distinguished honour you have been pleased to confer upon me in electing me your President. My second duty, and my privilege, is to speak in the name of your associates here, and bid you welcome to Cambridge.

We are met within the precincts of an ancient and famous University; so ancient, that its origin is lost in the mists of ages, and one which claims as her sons not a few of those whom educated men have delighted to honour as their noblest representatives in literature and science.

You will excuse a Cambridge man if he feel some pride in welcoming you to the University of Spenser and Milton—of Wordsworth and Tennyson; in pointing out to you the spots where Jeremy Taylor and Isaac Barrow became so learned and so eloquent; where Bacon first perceived the right road to scientific truth, and where Newton discovered the laws of gravitation; where Ray saw, and made others see, the wisdom of God manifested in the works of the creation; and where Harvey acquired at least that correctness in reasoning which qualified him to interpret aright the facts of anatomy, and demonstrate the circulation of the blood. And, before such an audience, I am reminded that Caius and Glisson, Heberden and Woollaston, have a place among our Cambridge worthies; and that, were I to speak of living physicians, I might mention other names as familiar in your ears and not less honoured.

Yet I must tell the plain truth, even though it may disparage in your esteem the University I love so well, and which, let me add, no man can fail to love and honour, who knows, as I know, its great and varied excellencies.

In addressing this great Medical Association on its first visit to Cambridge, I cannot avoid—so, at least, I have been told—I cannot avoid speaking of the University in reference to medicine; and, in so speaking, I must admit at once that its medical school is but a small one; and if it is to be assumed that the office of an university is to make physicians, and the reputation of an university is to be measured by the number it makes, I should have to confess that Cambridge has fallen short of its duty, and has no claim to a high reputation. But if the office of

an university be rather to educate men into the capacity for pursuing any profession, and, as regards its medical students, to train them in all that which “*quamvis non faciat medicum, aptiorem tamen medicinæ reddit*”; to take care that their medical knowledge be well founded, and that they do not obtain a medical degree until they have given the fullest proofs that their knowledge, wheresoever acquired, is real and at a high standard,—if these be the duties of the University of Cambridge, then I have no fear of criticism.

It is true that the courses of medical lectures delivered here, both have been and are less numerous and extended than those given elsewhere in the great schools of medicine; but it may be questioned how far this is a fault. Few persons doubt now that, in those great schools of medicine, where talent and industry and zeal have striven to give instruction in its utmost completeness, the students have been passing too much of their time in listening and too little in reflecting; that there has been too much teaching and too little time for study. The medical lectures delivered here have, at least, served well as an *introduction* to medicine; and the University has always encouraged its medical students to complete their professional education elsewhere, at the chief schools of medicine in large cities, where the extent of population and other circumstances afford to the advanced student certain advantages for practical instruction beyond those possessed by Cambridge.

So much for the medical teaching. With regard to another academical function—that of granting medical degrees—I need not say much. The University has been always more solicitous about the character than the number of those on whom it confers its titles and privileges. The standard of requirements for its medical degrees has always been high: the period of study for the degree of M.D. was formerly ten years, and is now eight; all students are required to reside within the University for three academical years, during which they are subjected to discipline and moral training, and receive their *social* education; they have to devote a considerable part of this time to general studies, which have always been insisted on here, and are now everywhere acknowledged to be an essential preparation for that of medicine. The examinations have been efficient. The system of paper-examination, which is now so generally adopted, had, I believe, its origin in Cambridge, and certainly was for years in use here for medical degrees, while elsewhere, in places which we should all name with respect, medical examinations were still conducted after the antique fashion—orally in Latin. The clinical examination, also—the most efficient test of practical knowledge—was first introduced here. I have the satisfaction of remembering that it was introduced by myself three and twenty years ago, and it has never since been discontinued.

The granting licences to practise medicine involves a responsibility which can be measured only by human sufferings and human lives. The plain duty of the University is, to take care that its medical graduates are skilled in their profession; and this first duty has not been neglected. But the University has aimed at something more than this. Its desire has been, and I trust ever will be, that its medical graduates should be men of liberal educa-

tion in the best sense of the words; that they should have a position in society fully equal to that of the other two learned professions; that they should be qualified, as far as education can prepare them, for advancing those sciences which are to be the study of their lives. And Cambridge has recently shown its belief, in opposition to what has seemed generally accepted, that there is the same value in general scientific or learned training for surgery as for medicine; the University now confers on surgery the distinction of an academical degree, and has fixed the requirements for its mastership in that art almost exactly on a par with those for its Bachelorship in medicine.

So much for Cambridge in matters strictly medical: and I think it may be fairly held, that the University has in these things not been negligent of its special duty. From this Association I believe that the University may fairly claim honour, for having done its share in upholding the dignity of the profession of medicine.

But the University has been charged with backwardness in other sciences in which we are interested—the sciences collateral to medicine—the group which makes up the subject of natural history.

Now, if I were asked whether this charge be well-founded, I might answer, by pointing to the teachers and the taught, to Sedgwick, Miller, and Babington, to Berkeley, Darwin, Ansted, Jukes, and others. But I would not so evade the question. I would rather say, that Cambridge has not done enough in natural history. This is, indeed, what I have maintained and acted on within the University for many years on all suitable occasions. Nevertheless, as I cannot shut my eyes to the shortcomings in other places, I feel inclined, not indeed to exonerate my own Alma Mater, but to distribute the reproach impartially amongst *all* the defaulters. And, moreover, if Cambridge is to be blamed, it would be unjust not to discriminate between the general academical body and the individual colleges. For it cannot be admitted, that the University as a body is indifferent to the natural history sciences. Visit its museums, and judge for yourselves. You will see what the University possesses in Comparative Anatomy, and (in justice I must add) how much it owes to the zeal, the labours, and liberality of Professor Clark; you will see museums of geology and mineralogy, of which any university might be proud; you will, I regret to say, *not* see, or not see to advantage, the botanical and zoological collections (the former a *very* rich one), but you may see the buildings, recently erected at great cost, in which those and the other collections will ere long be better displayed and made more available for study. And when you have also taken a stroll in the Botanical Garden, you will, I think, admit that, altogether, you have seen substantial proofs that the University does take an interest in the natural history sciences.

Again, nearly all of these sciences have been long taught, and well taught, in this place; and willingly studied too.

Three and thirty years ago, when I was attending the botanical lectures of the late Professor Henslow, his class numbered upwards of sixty, whose attendance was perfectly spontaneous. And who does not know our eloquent Professor of Geology? He has been lecturing here for nearly half a century, and the number of his hearers has generally been limited

only by the size of his lecture-room, and that is not a small one. Moreover, the University now invites the great mass of its students, *i.e.*, all who are candidates for the ordinary degree of B.A., to select for study some one of these sciences, as part of their academical course; and it has established the Natural Sciences *Tripes*, which is an *honour*-examination in the entire group of these sciences, and has been recently so improved and extended as to be now of equal scope with the examinations for mathematical and classical honours.

But, notwithstanding all this, the fact still remains, that Cambridge, so well known for classical scholarship and mathematics, and which supplies professors in these subjects to other universities, is but little thought of as a school of Natural History or Medicine.

What are the causes of this seeming anomaly?

Well, a glimpse of them may, I think, be seen in the *general* fact, that *no* university is, or ever was, equally distinguished in *all* branches of learning:—that one university is most famous for one kind of learning and another for another kind. Such was the case in olden times, and such is the case now. For a long period, the University of Paris was, on the whole, the most renowned University in Europe, yet its *medical* school was surpassed in turns by those of Salerno, Montpellier, Padua, and Leyden. And modern times present abundant instances of like kind—instances of universities eminent for their schools of theology or law or medicine, or mathematical science or classical learning, but eminent in one or two only of these subjects, and inferior in the rest.

Indeed, a special eminence in one or two subjects is apt to become an actual *cause* of inferiority in the rest; for it quickly becomes absorbing and exclusive. It attracts to the University those who have shown in early life a natural aptitude for the special branch of study, and who seek the spot where their peculiar talents will be best cultivated and most appreciated and fostered; and in course of time these students add the lustre of their own reputation to that of their Alma Mater, and so enhance her special eminence; and some of them become her leading spirits, and their tastes and predilections influence academical opinion, and tend to exalt still higher the prestige of their own favourite science. And the influence of this prestige is felt by *all* the students; even those who have come to the University with a different purpose are liable to be diverted from it by the attractions of studies holding a higher place in academical estimation. The late Lord Langdale came to Cambridge as a student of medicine; he renounced physic for mathematics, and was rewarded with the highest honours of his year. Isaac Barrow came hither to study medicine. He exchanged it for divinity, and became the greatest theologian of his time.

For a very long period the special eminence of Cambridge has been in the mathematical sciences and classical scholarship. These have been, and still are, the favourite and favoured studies. And can we wonder it should be so in the school of Bentley and Porson; or can we blame a preference for mathematics in the University that has produced a Newton?

When we consider how unready both individuals and institutions commonly are, to change the systems in which they have prospered and gained just



renown, it seems less strange that Cambridge has done so little, than that she has done so much, towards admitting to terms of equality with mathematics and classics any sciences or studies whatever.

But the prestige of the favourite studies has been enhanced beyond measure, and is constantly maintained, by that which is not in the power of the *University* to alter; namely, by the exclusive encouragement they have received from the *Colleges*, which, in regard to the disposal of their own funds, are wholly independent of the general academical body. The numerous scholarships and fellowships which are in the gift of the several colleges, are intrinsically very valuable, and have been awarded for a long series of years with the most scrupulous impartiality; so that they have become the crowning honours of successful talent, and its highest incentive to industry and emulation. Now these rewards have been given by the colleges almost exclusively for proficiency in mathematics or classics. The natural result has been, a virtual discouragement of other departments of science: for all students who are ambitious of distinction, or in need of emolument—all who have talents and desire to use them—have been stimulated to devote themselves to mathematics and classics, and seek the rewards of their labour in the only paths by which they could be reached. But brighter days are dawning: already in some of the colleges a proficiency in the natural history sciences has gained scholarships, and in a few cases helped candidates for fellowships; and there is good reason to hope, that before long these sciences will receive from the colleges generally their due share of encouragement.

In fairly considering the whole matter, we must not forget that the *chief* function of the University of Cambridge and of its Colleges is *general* education, and that to fulfil this function they must choose for the principal subjects of study those which are best suited for developing and strengthening the more important faculties of the mind. Now it may well be maintained, and is implicitly believed here, that the study of mathematics and of language (as exemplified in the classical writers of Greece and Rome), are, above all other studies, those which best fulfil the purpose of a liberal education. This is a question which might be discussed and debated at far greater length than would be agreeable either for you to hear, or me to speak: but at least thus much is certain, that there are no faculties to be educated more important than reason and language; and that mathematics and classics have been recommended for this purpose by many of the most thoughtful and discerning men in all ages, including our own.

And it must not be overlooked, that mathematics, as studied at Cambridge, are not merely an exercise of rigorous reasoning, but include the whole range of physical sciences to which mathematical processes have been applied—all that is comprehended under mechanics, hydrostatics, optics, and astronomy, and which, by the way, cannot be thoroughly followed or understood without a knowledge of such processes. And that the mathematical training has not been barren of results, there are abundant living proofs—Herschell, Airy, and Whewell, Stokes and Adams, William Thomson of Glasgow, and a host of others.

In short, the mistake of the colleges has not been

in their encouraging mathematics and classics, but in encouraging them too exclusively, and in not recognising the fact that natural history includes subjects, of which no man pretending to culture should be wholly ignorant, and that it furnishes the best supplementary means of educating certain faculties—particularly those of observation—which are not adequately cultivated in the two more favoured studies.

I regret that a desire for precision in what relates to Cambridge has led me into wearisome details. But the *general* question, whether the study of natural science should become an established part of the education of the higher classes, is a subject of such interest, as to need no apology for its introduction before any audience, and, least of all, before you. It is not only one of the great educational questions of the day, but a question, in the right solution of which no class is more interested than is our profession. I confess that, to me, it seems high time to consider whether natural science might not be useful as part of a liberal education, when an author of great distinction and undoubted learning—one, whose writings have been rewarded with the applause of the educated world and with some of the highest dignities in the gift of the Crown—states as a “well-attested fact, that a man’s body is lighter when he is awake than sleeping; a fact” (he says) “which every nurse who has carried a child would be able to attest”; and concludes from these *well-attested facts*, that “the human consciousness, as an inner centre, works as an opposing force to the attraction of the earth”. I quote from a *seventh* edition, *revised*.

To my mind, the *necessity* for more general instruction in natural science needs no further proof, when ladies and gentlemen appear in a court of law to vouch their belief in the supernatural powers of a crystal globe; when those who are called highly educated through the necromancer’s consulting room to hear disembodied spirits rap on his table: when they daily become the dupes of barefaced quackeries; and, while avowing their belief in what is absurd or even impossible, plume themselves on their superiority to prejudice, regard themselves with complacency as walking in the spirit of the age—as being *au courant* with its progress, and indignantly remind us of the persecutors of Galileo, if we question the accuracy of their facts or the logic of their conclusions.

Whatever may be thought of the enlightenment of the present age, there can be no doubt of the readiness and boldness with which it forms or avows its opinions. Far be it from me to question the birthright of an Englishman, to judge of all matters, whether he understand them or not. The right of private judgment is the most precious of civil rights; but it *may* occasionally make fools of us, when exercised upon questions in which we are uninstructed. Even freedom of thought is not an unmixed good. It stirs a community in *all* directions—not always in the direction of progress. For the unwise and presumptuous it is often the parent of mischievous errors, that find ready acceptance among the ignorant and indolent, and cost for their removal much time and trouble of wiser men. It is easier to refute errors than to remove them. Ignorance must be instructed, self-sufficiency must become modest, before it can be convinced.

I have sometimes fancied that the rapid succession

of brilliant discoveries and inventions which has characterised the present age, and should have enlightened it, has actually enhanced its credulity for the pretensions of quackery and imposture; that the unexpected and unimagined achievements of true science have so dazzled the minds of people, as to render them more accessible to other marvels, whether true or false, and more ready to yield unquestioning belief in *whatever* is new and wonderful: as, in times of old, the heroic deeds of a Hercules or King Arthur led their admiring countrymen to ascribe to them other achievements, not only unreal, but impossible: or as, in the sixteenth century, when men's minds had been roused and agitated by the spiritual preaching of the Protestant Reformers, a readier credence was given, not to spiritual *truths* only, but also to spiritual and mystical *errors*. Then was the time, when enthusiasts abounded, whose imagination called up before their eyes every object they desired to see; then it was that astrology was the most widely spread and most generally studied as an useful science; then it was that demons were classified, and that witches were burnt in thousands. Then, even self-reliant intellects that had thrown off the yoke of ancient beliefs, yielded a ready credence to almost anything which had a spiritual semblance. Melancthon was one of the chief defenders of astrology. Luther attributed diseases to the immediate agency of the devil, and was indignant with the physicians who referred them to natural causes. Paracelsus and Cardan, while shaking the popular faith in ancient physic, rested their own on cabalism and astrology.

In the old city of Aberdeen sorcery had lain undiscovered, though the holy clerks of King's College had been there for a hundred years, ready at any time to have exorcised it with bell, book, and candle; but in the fourth year after the founding of Marischal College and the spiritual teaching of its Protestant professors, twenty four witches were burnt alive for dancing with the devil around the market cross.

As the minds of men in those days, when awakened to new and deep spiritual convictions, were opened also to mystical *errors*;—so in the present day, when startled with scientific wonders beyond their comprehension, do they gape at and swallow indiscriminately everything new that is presented to them under the outward guise of science:—and this, while they are disposed rather to scepticism than credulity in matters of ancient belief.

Truth, it has often been said, is stranger than fiction. They that use the proverb have, commonly, in view only the events of history or of social life. But it is equally true, if we compare the established facts of science with the pretended facts of fraud or quackery. If you tell an uninstructed person that you can talk easily and fluently with a friend a thousand miles off, can write to him at that distance in letter or in cypher, whichever he prefers, and that all the help you need is in some pieces of zinc and copper and some acid and a long piece of wire, and a thing somewhat like the face and hands of a clock: and then tell him, that by merely resting your fingers on a table, you can make it turn round and stand on one leg, and then move of itself about the room: both things may seem to him very strange, very wonder-moving; but surely the truth here must seem stranger than the fiction: to an uninstructed

person table-turning must seem at least as credible as electric telegraphy. Or, again, if you were to tell him, that there are rays of light which give no light: that, when separated from other rays and admitted into a darkened room, they cannot be seen; they give no light, and the room remains dark as before; and yet, that Professor G. G. Stokes has made them visible, has made these dark rays shine and give light in the room, merely by intercepting them with a solution of a salt of quinine contained in an ordinary glass:—and if, then, an advocate of homœopathy were to expound to the same hearer his views of the action of medicines:—surely the dogmas of Hahnemann (unproved and unsound as we know them to be) may seem to the uninstructed person no more strange or incredible than what you had told him about the rays of light, though the latter be well-assured facts, that can be verified at any moment, and are in harmony with the whole body of optical science.

It is plain that by no instinct, no common sense, no natural power, can any man discern between truth and untruth in these matters: to the uninstructed in sciences of observation the truth must seem stranger, less credible than the fiction. It is to this want of special scientific instruction that we must ascribe the popularity of error. For it must be admitted, that they who believe the fictions are not all, in a general sense, fools: there are among them prudent statesmen, astute lawyers, faithful ministers, discreet housewives, such as in their several callings we might be content to take as our guides. And yet, because of their want of scientific training, their want of that knowledge which would tell them what it takes to establish a real fact in science, they are unable to distinguish truth from its counterfeit, or to gainsay the pretensions of quackery and imposture.

How, then, can people be guided to a better judgment in these things? Chiefly by being themselves in some measure instructed in some of the sciences of observation, and then by being taught that, in such things as I have put in contrast, the one set of statements are, and the other are not, founded on careful, repeated, various inquiries by men of special training; that the one set are, and the other set are not, provable by every test to the satisfaction of all who will look on and who are too acute to be deceived; and, finally, that the truths are, and the fictions are not, parts of a system or whole body of sciences.

It is this—the value and weight of a body of science—that uneducated people cannot understand. They may perhaps form some judgment whether the reasons advanced for any new view be in themselves good or bad, but they cannot estimate the kind or amount of evidence necessary to establish its truth; nor can they appreciate the objections to it. They know not the multitude of well-assured facts which make up the body of true science, and each of which must be a standing argument against the admission of any new view that is at variance with them. To persons versed in science, this objection in its aggregate is well-nigh conclusive. We may, in short, safely assert, that whatever cannot bear the test of other scientific inquiry, whatever cannot be incorporated with other knowledge, is probably not true.

These, unfortunately, are tests which they who are uninstructed in science cannot apply for them-



selves; and, as this class must always remain a large one, we may be sure that quackery and credulity, fraud and folly, will never cease while the world lasts. They are evils that can never be wholly removed, yet, assuredly they may be mitigated.

If some portion of the natural sciences, and in particular those which treat of the laws of life, should become an established part of the higher general education—the education, not of medical students only, but of every English gentleman, we may expect that society will, in course of time, become more conversant with the kind of knowledge required for distinguishing between true science and its counterfeit. We may reasonably look forward to this improvement, if the universities of Oxford and Cambridge go onwards in the course they have taken of late years, and do not rest until no one shall be called well educated who has not been trained in the knowledge of some natural science. I say, expressly, *some* natural science; for he that has studied even one, and has learned with what temper it must be pursued, with what labour it has been set up, with what evidence every new doctrine in it must be supported, and how that evidence must be able to bear a jealous cross-examination,—he, I say, that has learned this in any one natural science, will not lightly adopt spurious imitations of facts in any other.

And this wider diffusion of a knowledge of natural science—how much it would add to social and national happiness! Very few men pass through life without repeated occasions for the exercise of scientific knowledge in questions of their own or others' health, or property, or social relations; and according as a man guides himself, or submits to guidance, wisely or unwisely, so is the result for his life, his health, or a great portion of his happiness.

But if we would see to what a height of importance the correct appreciation of science may rise, let us look at its bearings on matters of vital interest to the whole nation. We have an instance in what Sidney Herbert accomplished for the health of the British army. Till 1857 the mortality in the infantry serving at home was nearly *double* that of the civil population of the corresponding ages. *Now* it is actually *less* than in civil life. It is *less than half* of what it was. This represents the saving of the lives of British soldiers in time of peace. The contrast is even more striking in war, if we compare the mortality from sickness in the two wars in China—the one before, the other after the introduction of the new regulations;\* and yet these were little more than well-known sanitary rules, applied intelligently by an able and earnest minister.

Then, if we turn from what has been done, to what has *not* yet been done—to the report of the sanitary state of our army in India, to the facts which it discloses, and the sad reflections it suggests—we may see, in matters in which the highest political interests of the empire are concerned, how much *might have been* effected by men of station if they had been instructed in sanitary science, or had guided themselves by the advice of others who were.

The recent address of the late President of our Bengal branch proves, if proof be wanted, that a comprehensive knowledge of sanitary science does exist in India, and that those who possess it are not

only willing, but earnestly desirous to employ it in the public service.

But it is a *general* diffusion of such knowledge, or at least of respect for such knowledge, which is needed in a country like England; where the government is so much under the immediate influence of popular opinion, that scarcely a step can be taken for which the general public is not prepared. An autocrat, or his minister, if he be alive to the advances of science, may apply them at once to the exigencies of the state. But with us, there can be little progress without a progress of the whole nation.

After all, it is not to be maintained that the study of natural science has the peculiar merit of making men in all respects wiser, than the study of any physical science, or of literature, might make them. I fear it must be admitted that the body medical, instructed though all of us have been in natural science, has furnished its share of victims to the quackeries of religious profession, of politics, and of speculative finance. But this only strengthens the argument for the necessity of general education in natural science. Just as scientific men err, when they engage in matters that they have not studied; so do the unscientific, when they essay to judge in scientific questions, without even knowledge enough to choose their guides.

And if some acquaintance with the natural sciences be so needful for men in general, what should be expected of *us*, the medical profession, who practise daily an art which has its only sound basis in these very sciences?

I am well aware of the difficulty of maintaining a high standard of scientific acquirements for all, without exception, that seek to enter our profession; but surely this is what should be unceasingly aimed at. Without scientific knowledge, the practice of medicine becomes mere empiricism; without scientific and general acquirements, our profession may strive in vain to uphold its social status and its influence.

Every ignorant man admitted into our profession has an injurious influence on the estimation in which the entire body is held. His demerits have a tendency to lower us throughout the circle in which he is known. The want of confidence in him—the want of respect for him—begets distrust and disrespect for the profession in general.

Contrast with this, the influence on our social status of such men as Mead, Freind, and Arbuthnot, Thomas Young, Abercrombie, and Brodie, and of the many others, whose acquirements or achievements in literature or science have raised them to eminence in the eyes of the world. Have they not elevated in some degree the whole body medical; nay, are there not some of our own associates, now living, who have made us all their debtors by the lustre they have thus reflected on our common calling?

And so, likewise, must our scientific character be the measure of our social *influence*; and especially of our power of maintaining truth against error in questions that are daily exciting the attention of society, and of which we ought to be the accepted exponents.

When we consider that the sciences, with which we are, or ought to be, conversant, include subjects of which people in general are so ignorant, and in which nevertheless they take so lively and curious an interest, and which concern their well-being in al-

\* See *Army Sanitary Administration and its Reform*. By Florence Nightingale.

most all they do or suffer; surely it is in our power, as it certainly comes within our duty, to exercise a wide influence for good; surely it is our duty, and may be our privilege, to be in these matters the scientific "salt of the earth."

Our profession has never been backward in such work. The learned and ingenious Author of *Inquiries into Vulgar Errors* was a provincial physician. It was a physician also who, in the sixteenth century, strove single-handed with the arms of reason against the barbarous hosts of witch-burners, and bore the glorious reproach of folly and presumption for putting the judgment of an insignificant physician in opposition to the dicta and decrees of emperors and kings, legislators and judges, divines and philosophers of all ages and all countries.\* And something has been done in our own time—and well done—for the direct refutation of error. The most fashionable of modern quackeries has been ably and thoroughly exposed by Dr. Simpson.

Few have the ability for works of this kind; but there are many of us, who might do *something* to prevent the spread of mischievous errors. We might do much, if we were to aid in such instruction as would be some *safeguard* against them. We know what was effected by the late Professor Henslow; how in a few years he brought about a complete revolution, intellectual as well as moral, in a grossly ignorant village community; how even such people as those were instructed in some knowledge of science, and filled with a rational and elevating respect for it. And really the means employed were little more than might be in the power of any medical practitioner who has his home in the country. It was not the depth of Professor Henslow's knowledge, but the simplicity with which he imparted it, that gave to it so powerful an influence. Our country members are quite capable of giving short, easy lectures, as Professor Henslow did, and many of them are capable of doing it well. I am not unaware of the objections that may be urged against medical men lecturing, and of the fatally easy transition from lectures for the benefit of others to lectures for the benefit of one's self; but I think such objections are not applicable to the case of a man instructing the poor of his own village, where he is officially charged with the care of them in sickness—in fact, though not in name, the true guardian of the poor,—and where some little instruction in such simple matters as the air they breathe and the food they eat may save his poor neighbours from suffering or even death, and himself from some portion of his ill-requested labours.

I am disposed even to think, that our patients of the upper classes would have more confidence in orthodox medicine, if we were to vouchsafe more frequently to gratify their natural curiosity as to the nature of their diseases and the processes of cure. I am well aware of the opinion of shrewd "practical men", that no doctors acquire a reputation for skill, like those that hold their tongues; and, doubtless, silence is the most prudent for those, that aim to be counted wise, though they be not so; but, I think, nevertheless, that an explanation of the case is as much due from the physician to his patient, as it is from the lawyer to his client; and that the confidence of the public in rational medicine would be strength-

ened by such explanations. I do not mean that the doctor should put on an air of profundity, and look, like Lord Thurlow, more wise than it is possible for any man to be; nor that he should impress on his patient that

"these are diseases he must know the whole on,  
For he talks of the peritoneum and colon";

but I mean that he should be willing to give a plain explanation in words as free as may be from technicalities.

We do injustice to medicine, if we treat it as a mystery. It is a science, and entitled to rank as such; and we at least should be ready to show that its maxims are founded in truth and reason.

Let us hope that the educational changes now in progress will aid us in maintaining the dignity which is its due;—that, when people are better instructed as to the sciences on which medicine rests, when they themselves have examined into some part of its broad and firm foundations, they will have a juster appreciation of medicine itself. Let us hope, that medicine will then receive the respect that is due to it, as the only one of the learned professions which holds its doctrines open to all inquiries, and never condescends to uphold itself on any dogma either of authority or tradition. Let us hope—as we have a right to hope—that medicine will then be honoured as the profession in which all discoveries and inventions are offered freely for the benefit of mankind, and in which their concealment for selfish purposes, or their appropriation by patent right, is held to be disgraceful.

And till then, if the world deny to our profession the full honour which we feel and know is due to it, we may be well content with the ordinary round of duties, which are at once our lot and our privilege: we may be content with the internal satisfaction that our time is spent to the best of our ability in doing good to our fellow-men; that we do not rest supinely satisfied with what is imperfect in our science, but are ever earnestly and laboriously seeking for fresh light; and, when God vouchsafes it to our inquiries, we use it gladly in such works as he would have us do—in the relief of human sufferings, in healing the sick, in striving to make the lame walk and the blind see—in earnest endeavours to follow our Divine Exemplar, though it be with the limited powers and faltering steps of human infirmity.

QUACK DOCTORS AND JEWS. Will you endeavour to expose one of the very obnoxious forms of quackery adopted by an advertising firm in London, called Messrs. Harvey and Co? A cornet in H.M. Regiment, son of a F.R.C.S.Eng., received by post a smart little book professing to dilate upon the virtues of the only successful remedy for local, general, and nervous debility, etc., also strongly recommending the preparation sold by them under the name of Sir Astley Cooper's Vital Restorative in 11s., 33s., and £5 cases. He received by the same post notices of the very easy terms on which certain members of the Jewish persuasion would be willing to accommodate with ready cash. This Harvey and Co. is no other than a person who has been removed from the *Medical Register*, and from the lists of members of the Royal College of Surgeons in London and the College of Physicians in Edinburgh. Thus, it appears, quack doctors and Jew money-lenders go hand in hand in this metropolis. (*Dublin Medical Press*.)

\* Bodin, near the conclusion of his *Refutation des Opinions de Jean Wier*.



THE

## ADDRESS IN MEDICINE.

BY

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A REVIEW OF THE PRESENT STATE OF  
CARDIAC PATHOLOGY.

I FEEL that there is a certain fitness in taking as the subject of the Medical Address on this occasion, the Present State of Cardiac Pathology, however imperfectly I may be able to follow out this idea under the circumstances.

It would be a pleasure to trace, under the full influence of Cambridge associations, the successive steps by which our knowledge of the physiology and pathology of the heart has risen to its present height; to recall the history of the growth of the first germs of truth, through doubt and contradiction, into acknowledged principles. For here was—nay, is—the home of Caius, who, with all his quaintness and garrulity, wise beyond his generation, made provision for the study of pathology on the only sure basis, the study of human anatomy. Here, in Caius' own college, the first fruits, as it might be, of the seed thus sown were reaped; and in the long list of names which can never die while knowledge lasts, we claim Harvey peculiarly as our own.

But I fear that such a narrative would scarcely satisfy the purpose with which we are here gathered together; and to bring the subject within the practical limits of an address, I must abbreviate, as Bacon has it, by cutting off rather than by contracting. For time would fail us to treat the subject thus at all adequately; and, curtailed of its due proportions, the history would lose all its interest in such a sketchy narrative. We shall find more than enough to occupy our time while keeping within the strictest limits of the proposed subject; and even so, it will be necessary to omit altogether the consideration of many points, that we may be more free to concentrate our attention on others which still present open questions, and are still, to many of us, the subjects of clinical investigation.

Diseases of the heart may be arranged, for our present purpose, most conveniently under three heads, according as the investing membrane, or the lining membrane, including the valves, or the muscular substance, be affected. With regard to each of these classes there is something to observe. I cannot expect universal, unqualified assent to all that I shall have occasion to say on this subject; and, indeed, I may seem on many points rather to invite controversy. But cardiac pathologists have much on which they can agree; much, indeed, on which I assume they do agree, and which I shall accordingly pass over without comment. Our common ground is so wide and so certain, that, if we differ with regard to some of the details, some novel propositions, at least here we may disagree very amicably.

## I.—PERICARDIAL AFFECTIONS.

Pericarditis, according to this plan, might at first sight seem to be a part of the subject to be summarily passed over; for there are really few diseases about whose signs and symptoms we are more perfectly agreed, or with whose clinical history we are more familiar. Yet there are questions as to the ultimate consequences of pericarditis still unsolved, and inviting further research; and even in its familiar clinical history there is something more to be made out.

The pericarditis which we see in daily practice, and which is generally referred to by writers on the subject, is almost exclusively the result of rheumatic fever. Our information concerning it is very explicit. We know that it is to be looked for as an early complication in cases of rheumatic fever of intense severity; but that in ordinary cases it occurs later, about the tenth day on an average; and that the frequency of its occurrence bears no close relation to the severity of the rheumatic affection; that, once begun, the pathognomonic to-and-fro sound continues, for the most part, without intermission until the two opposed surfaces are agglutinated together; and that the specific symptoms are generally severe enough to call our attention to the local disease, even though we may not be particularly looking out for its occurrence.

So familiar are all these details, that it is with a feeling of shame we stumble, in dissection, on pericarditis which has been overlooked during life; and we wonder that a disease which usually quite obtrudes itself on our observation, should have so entirely escaped us. But the fact is, that these latent cases of pericarditis constitute a class by themselves. The disease is a secondary complication of Bright's disease of the kidneys, a contingency of dying rather than a cause of death; and, as such, it has no overt symptoms, any more than the other inflammations of serous membranes have which occur under similar circumstances.

The cause, however, of the frequent coincidence of albuminuria and pericarditis is not clear; and we are merely expressing, not explaining, the fact, when we say that certain morbid conditions of the blood are singularly prone to induce inflammation of the pericardium. Such a tendency to involve the investing and also the lining membrane of the heart is found in the exanthemata of childhood, particularly in scarlatina. But here we have to do, not with an indication of coming death, but with a disease which is to produce its fruits in after years.

Tubercular pericarditis belongs to another category. In comparison with the other serous membranes, the pericardium suffers less frequently from tubercle, and the symptoms are less severe; but tubercular pericarditis has characters of its own, which may claim a passing remark while discussing the less usual forms of pericardial inflammation. Slow, for the most part painless, with long persistence of the auscultatory signs, and having always, as far as I have seen, a fatal issue, it stands in the strongest contrast to the rheumatic form of the disease.

When cases of pericarditis die, the fatal issue turns generally less on the condition of the pericardium than on the contingent inflammation of the lungs and pleuræ; but most cases of pericarditis (still

speaking in reference to the rheumatic, the familiar form of the disease) get well; the inflammation subsides, the opposite surfaces are united together into one membrane, and the fibro-cellular tissue outside the pericardium becomes loosened, to allow of the movement which should have taken place on the two free surfaces. We find adhesions of all degrees of firmness, and over whatever extent of surface. There may be a white patch only of thickened membrane, or a flock floating loose at one end, or a band connecting the two opposite surfaces, or anything, indeed, up to universal close adhesion of the pericardium. And the connecting medium may be filmy, or fibrous, or earthy resembling bone; the extent of the adhesions and the density of the connecting medium depending respectively on the extent and duration of the original inflammation: if, at least, the same rule holds good for the pericardium as for the pleura.

These are anatomical changes. What is their pathological value? Do they represent an abiding condition, which has persisted for years, since the subsidence of the inflammation in which they originated? And if so, what is the effect of this obliteration of the pericardium on the action of the heart? Or do pericardial adhesions naturally tend to obsolescence and absorption?

First, with regard to the anatomical changes. My own experience inclines me strongly to believe that adhesion of the pericardium is, in the majority of cases, the natural termination of pericarditis. When general adhesion has once been effected, and the two opposing surfaces are firmly agglutinated, I believe that these are very rarely separated by subsequent inflammatory exudation, or set free by absorption of the connecting fibro-cellular tissue. Cases have, indeed, been recorded in which, after general pericarditis had pursued its usual course, the pericardium has been found free from adhesion or any trace of the previous inflammation. But these seem to be exceptional cases, and they scarcely justify our claiming for the pericardium a power of repair greater than that of the other serous membranes; for I find, on analysis of a large number of cases, that observations of adherent pericardium after death bear the same ratio to observations of pericarditis during life as any other anatomical lesion does to its observed symptoms. As far as I have seen directly, or can infer indirectly, the pericardium becomes adherent after inflammation, and once adherent nearly always remains adherent.

Next, as to the effect of general adhesion of the pericardium on the action of the heart. The mere fact that there are no certain symptoms by which the existence of general adhesion of the pericardium can be ascertained during life, is of itself almost a conclusive argument against attaching any pathological importance to this condition. Where there is no accompanying valvular disease, no thickening of the investments of the heart by earthy or so-called cartilaginous deposit, the heart does not become enlarged in consequence of general adhesion of the pericardium. The requisite freedom of movement is gained by loosening of the fibro-cellular tissue outside the pericardium; and, tested by its effects on the heart itself, the alternative of moving on a polished serous surface, or in a loose bed of cellular tissue, seems indifferent. But where the connecting medium is an unyielding tissue, earthy or fibrous, it consti-

tutes a most serious impediment to the heart's action, and the effect is most disastrous.

Our accurate knowledge of diseases of the heart is of such recent growth that many of us may probably have watched the first gradual development of the truths now universally received and embodied in the systems of cardiac pathology of the present day; and many of the recorded cases of disease of the heart, the cases which have become classical, may have been personally under the observation of some of those whom I am now addressing. None would doubt the correctness of the characters in which, under our own eyes as it were, pericarditis has been drawn; yet I doubt if any one would now describe pericarditis in the same terms as we used to know it. True, there are still cases of pericarditis, happily rare, where human suffering might seem to find its extreme limits compatible with life; and chorea, in connection with cardiac inflammation, is as dreadful as ever. But, whatever the cause may be, pericarditis as we see it now is shorn of more than half its distresses and dangers. It is of less frequent occurrence, and the contingent pulmonary affection is less severe; and I am free to confess my belief that the cause of this difference is to be found in the general substitution of an alkaline for a mercurial and antiphlogistic plan of treatment in cases of acute rheumatism.

## II.—ENDOCARDIAL AFFECTIONS.

Not many years ago there were few subjects more perplexed than the interpretation of valvular murmurs. While the auscultation of the lungs was, with perhaps the single exception of the meaning of long expiration, as well understood as it is now, the auscultation of the heart seemed a mass of confusion. But now all this is changed. Not that the practice of auscultation of the heart is absolutely perfect, or that pathologists are unanimous in their interpretation of all the physical signs. But at least we are agreed as to the principles. And not only are the points on which we are not all unanimous very few; but these are also, for the most part, unimportant, or in their nature incapable of satisfactory demonstration. And now, instead of regretting our shortcomings in the physical diagnosis of valvular disease, we rather complain that our exceeding accuracy has so little practical application.

The received canons of cardiac auscultation assume that the first sound coincides, in point of time, with the contraction of the ventricles; the second with the closure of the sigmoid valves and the recoil of the blood. There is a very general agreement as to the cause of the second sound; but no theory of the first sound has met with universal acceptance.

I almost fear to venture on a subject round which there still clings a little of the polemic spirit which formerly characterised all discussions relative to the auscultation of the heart; but, without proposing any new theory, I may be allowed to offer some remarks on the general bearings of the question, on the separate elements of this somewhat complex problem. This is a case in which the very simplicity of an explanation is an argument against its soundness; for surely no theory can be correct which refers the first sound of the heart to one agency alone, disregarding the others which, silently or not, concur in



the systole. And the sounds of muscular contraction, of valvular and muscular tension, and of the motion of the blood, must all severally be accounted for before we can accept any theory of the first sound as altogether perfect and satisfactory.

The motion of the blood in the heart probably produces no appreciable sound in the healthy state. In certain cases of anæmia, indeed, we recognise murmurs due to this cause in the heart itself, as well as in the large vessels; but such murmurs are very different from the physiological sound of the systole. In some cases of acute rheumatism, however, and in certain other cases, a murmur of another kind is occasionally audible. It is soft, but not blowing, somewhat resembling the so-called muscular sound. It continues equally through all the period of the first sound, being perceptible all over the cardiac region, but not beyond. It does not follow the rules of any specific valvular murmur, nor does it change into one: indeed, valvular murmurs are less apt to occur in cases where this murmur is found than in others. It does not occur as an early sign in rheumatism, and it passes gradually away. I believe this murmur, on these grounds, to be an exaggeration of the normal blood-element of the first sound; but, even assuming the correctness of this description and interpretation, still the statement remains substantially true, that in a condition of health the sound of the motion of the blood in the heart is inappreciable.

On physiological grounds alone, muscular action would claim consideration in any theory of the first sound; but pathology seems to furnish experimental evidence, which proves beyond a doubt that a certain portion of the first sound of the heart is produced by muscular contraction. Thus, where the hypertrophied ventricles constitute a large mass of muscle, the first sound is altered; conformably to this change in the heart's structure, it becomes dull and heavy. Conversely, where dilatation predominates over hypertrophy, and the muscular element is deficient, the first sound is sharp and ringing. Again, where the muscular force fails, as in some cases of fever or of fatty degeneration of the heart, the first sound is almost inaudible.

The other element of the first sound of the heart is the result of muscular and valvular tension, that is to say, of the recoil on the auriculo-ventricular valves. This is found in the greatest perfection where the contraction is vigorous, but the walls of the ventricles are not so much hypertrophied as to deaden the sound. Where the dilatation is excessive, the first sound is represented almost entirely by this recoil, by the ringing click of the closure of the large auriculo-ventricular valves; but where the muscular force fails, the recoil fails also.

It is difficult, even in theory, to separate these elements thus mutually dependent on each other, and in practice they are inseparable. It is the valvular and the muscular tension, indeed, which mainly give the time and character of the first sound in the physiological state; and it is in them that the effects of any valvular imperfection are most perceptible. But these are only a part of the normal first sound. The practised ear, apart from all theoretical considerations, seems to require that something else should concur with, and bear a certain proportion to, these elements; and the deviations from the normal first sound, which hypertrophy, or softening, or dilatation of the heart involve, are only explicable on the

assumption that this something else is the sound of muscular contraction.

A received principle of interpretation of valvular murmurs is, that murmurs referable to certain valves are heard loudest at certain points corresponding respectively to those valves. Murmurs, for instance, heard loudest at or near the apex of the heart, are referable to the auriculo-ventricular valves, and commonly to the mitral; murmurs loudest at the base, to the sigmoid valves, and commonly to the aortic. So far, we are all agreed. But a further analysis raises questions on which there is room for great difference of opinion.

Thus, to take a common instance: a murmur audible at or near the apex only, accompanying the first sound, rising in intensity with the continuance of the first sound, and ending suddenly with a snap at its closure, admits of more than one interpretation. Its seat is unquestioned—the mitral or the tricuspid orifice. But is it due to obstruction to the flow of blood from the auricle to the ventricle during the auricular systole, or to imperfection of the auriculo-ventricular valve, allowing regurgitation during the contraction of the ventricle? To the first explanation we may object that a direct mitral murmur, such as is generally admitted to be of this nature, is quite unlike the murmur under consideration. It is soft, and closely resembles the murmur of sigmoid regurgitation. Such a murmur is very rare, while the murmur under consideration is not at all uncommon. It may be questioned, too, whether the contraction of the auricle, slight and momentary as experimentalists report it to be, is capable of producing so loud a sound. To the second explanation, I do not see that there is any insuperable objection. It assumes that the coaptation of all the portions of the valves is not simultaneous; but that when, at a certain point of contraction, the valve is closed, the regurgitant stream is cut off, and the cessation of the murmur coincides with the sudden jerk of valvular tension. In favour of this view, it may further be urged that this peculiar murmur is not always a sign of organic disease. It is often a murmur of palpitation, where such disturbance of the rhythm of the heart's contraction is singularly liable to occur.

I have selected this as an illustration of the points in the interpretation of valvular murmurs, which still remain open and doubtful questions. They are doubtful, not from any want of agreement as to the principles, but from the practical difficulty of applying them; and though, in this instance, I have adopted the interpretation which seems to be most in accordance with observed facts, I feel that it is scarcely possible to determine absolutely which is the correct one, whether this murmur is direct or regurgitant.

The subject of tricuspid murmurs and tricuspid regurgitation is another disputed point, incapable of solution by direct experiment. Experiments have, indeed, been tried bearing on this point, by distending the ventricles with water; but the play of the valves of a dead heart is so very different from what must take place during the contraction of a living heart, where each columnæ carnea has its special duty to perform, that the physiological inferences from such experiments are worth very little. After frequently repeating the experiment, however, I must say that I never felt satisfied that the retaining power of the tricuspid valve was really less than that

of the mitral, nor have I seen anything to countenance the theory of its so-called safety-valve function.

On the question of tricuspid regurgitation, indeed, which these experiments are meant to elucidate, observers are probably not so much at variance as they might seem to be. Derangement of the circulation on the left side of the heart is followed in due course by derangement on the right side; and as the right ventricle cannot clear itself fast enough through the obstructed lungs, the effects are further transmitted backwards into the veins of the systemic circulation. But a moment's consideration will shew that the obstruction is not necessarily transmitted specifically by tricuspid regurgitation. The obstruction in the veins is the same, whether the blood is prevented from entering the ventricle, or whether it is regurgitated through the tricuspid valve after it has gained admission into the ventricle. Sometimes we seem to find evidence of tricuspid regurgitation in the condition of the jugular veins during life; but these cases are rare, and it is only on theoretical grounds that the frequency of tricuspid regurgitation can be maintained. Notwithstanding the high authority which is quoted in favour of the safety-valve function of the tricuspid valve, that is to say, the occurrence of tricuspid regurgitation from very slight causes in the healthy state, its advantages appear to be very problematical. It would be only, at best, transferring to the brain and other organs the mechanical pressure which would be sustained equally well by the lungs, and certainly very much better by the mechanical arrangements of the heart itself.

If these views be correct, any long inquiry into the grounds of the commonly received opinion, that tricuspid regurgitation is not usually accompanied by valvular murmur, would be superfluous; and the habitual absence of any murmur in cases of obstruction of the right side of the heart, so far from proving that tricuspid regurgitation is unaccompanied by murmur, must, in such case, be added to the other arguments intended to disprove the opinion of the occurrence of actual tricuspid regurgitation. There do not seem, indeed, to be any sufficient grounds for exempting the tricuspid from the same physical laws as the mitral valve. And certainly tricuspid murmurs are occasionally distinctly to be recognised. Only, they are rarely audible for two reasons: first, because when they do occur they are singularly liable to be drowned in the sounds of pulmonary obstruction with which they habitually coincide; and secondly, because, occurring as transmitted tricuspid obstruction does towards the end of heart-disease, murmurs on this side of the heart would be even more likely than mitral murmurs to become inaudible through feebleness of the current of blood.

One seems to breathe more freely on passing from the doubts and difficulties of affections of the auriculo-ventricular valves to the comparative certainty of the interpretation of sigmoid murmurs. The only point, indeed, which need delay us here, is the differential diagnosis of pulmonary and aortic murmurs. The diagnosis itself is easy enough with a little practice. A murmur loudest over the sigmoid valves, audible in the second left intercostal space for two or three inches, but inaudible along the aorta or in the carotids, has its seat in the pulmonary artery; due care being taken not to be misled by a systolic pericardial friction-sound confined to the base of the

heart, or by a murmur in the innominatæ veins. Nor should there be much difficulty about the practical application of this knowledge when the opportunity arises. Thus, while murmurs in the pulmonary artery are common enough, disease of the pulmonary valves is so very rare that few physicians probably have met with more than one or two cases in the course of their experience. A murmur in the pulmonary artery is, therefore, almost certainly functional. If we can do no more, then, in a doubtful case, where our opportunities of observation are limited, than assure ourselves of the presence of a pulmonary murmur, we have grounds for hoping that the coincident aortic murmur may be functional likewise. But this analysis of a murmur at the base of the heart may lead to more positive conclusions under favourable circumstances; for if, by patient observation, a murmur at the base of the heart be found one day in the pulmonary artery only, and another in the aorta only, though the murmur may persist for weeks, still expressed, on less attentive examination, as a murmur at the base, the conclusion that the affection of the sigmoid valves is altogether functional is quite irrefragable. On such analysis may turn the power of distinguishing between a passing ailment and disorganisation of the heart—the alternative of life or death.

I have spoken of received canons of cardiac auscultation, and, passing over many portions of the subject as settled and certain, have dwelt rather, as our time allowed, on those portions which demand further inquiry. But the present condition of our knowledge of cardiac pathology would not be truly represented, unless some practical considerations, which detract very largely from our seeming power of accuracy of diagnosis, were put in the strongest light; for, settled and certain as these canons may be, accurately as they may often apply, yet it is no exaggeration to say that there is not a single murmur, endocardial or pericardial, which may not, under certain conditions, be produced by some other cause than that to which we habitually refer it.

But what does this amount to, admitting it to the fullest extent? That the whole practice of cardiac auscultation is a mass of confusion and error, resting on signs of equivocal interpretation? Nothing of the kind. Only we must not attempt to deduce from these auscultatory signs more or less than they fairly convey. We cannot attach an unequivocal meaning to each sound, regardless of circumstances; but we must examine the auscultatory evidence from other points of view, eliminating, by the aid of these circumstances, the various surd answers till we arrive at the one which alone is compatible with the results obtained in other ways. The precision with which a simple, slight case of heart-disease may be made out, is often quite wonderful; but the slightness and the simplicity are generally necessary to this precision. It is the want of simplicity that baffles us in many cases of aneurism, where, with all our care, we cannot eliminate all the possible erroneous answers. Even in the case of a single well-marked sign there may be a twofold interpretation. Permanent patency of the aortic valves and dilatation of the left auricle, for instance, are not the only solutions of which a diastolic, purring tremor at the base, and a systolic, purring tremor at the apex of the heart, are respectively capable. And, not to lengthen this list of doubts and difficulties needlessly, while the most intensely



loud murmurs may be independent of organic disease, the most extreme disorganisation of the valves is frequently declared by no murmur at all at the seat of disease. Yet there is no confusion or perplexity, if only we do not strain the auscultatory evidence beyond its legitimate sphere; if we learn not only what it can, but what it cannot tell us.

We owe our exact understanding of the various signs of valvular disease to the zealous pursuit of morbid anatomy in combination with close clinical observation. Only a small part, however, of the labours of the morbid anatomist are thus directly available for practice. The exact shape of the mass which obstructs the current, or of the fissure which allows the blood to regurgitate, the structure of the growth, or the nature of the walls of the chink, these have little or no bearing on the auscultatory signs, however great their pathological value may be in other ways.

The anatomical changes with which we are most familiar, are simple thickening and fibrinous deposit, both which we have learned to associate with acute rheumatism. The connexion between these two morbid appearances, between the recent formation which we doubt whether it be due to exudation or accretion, and the thickening to which this leads in the course of years, may readily be traced in a series of cases. A careful study of such a series, however, leaves no doubt that the changes induced by rheumatism on the valves of the heart do not always tend to contraction and disorganisation of these valves; but, in what proportion of cases no one can say, are capable of the most perfect repair.

It is in rheumatism, for the most part, that the changes in the valves, which we are now considering, originate; but the specific influence of rheumatism probably does not extend beyond the earliest stages. There is nothing, under ordinary circumstances, in the after progress of the original warty growth, but what we may see in any other part as a result of simple inflammation; and the modifications which do occur are not due so much to general as to local influence, such as accretion from the blood and mutual attrition of the valves. Under ordinary circumstances the products of inflammation undergo the same changes on the valves as elsewhere; the adventitious matter contracts, coalesces with the subjacent membrane, and finally is removed by absorption. I believe this to be the rule, though in a certain number of cases this perfect repair fails, and inflammation results in permanent injury by induration of the valve.

But where the constitution of the blood is so altered as to favour accretion from the passing stream, valvular disease assumes certain specific anatomical characters. The coagulable lymph deposited under these circumstances has a singular want of cohesion, with a tendency to soften and degenerate into earthy or fatty matter; and so the effects of mutual attrition of the thickened valves become very manifest. As the seat of the disease may determine, the long, leathery tails which hang in the stream, or the round, globular vegetations which nestle among the columnæ carneæ, or in the tips of the auricles, put on various shapes, and undergo further changes peculiar to themselves. These have all names of their own, unnecessary perhaps, for they are only severally illustrations of processes which may be observed in other parts of the body; but a form of disease constantly occurring in any organ has a special interest to those

who make the diseases of that organ their study, and with this interest a special nomenclature commonly associates itself.

This change of form and disintegration of the growths on the valves of the heart, has a further connexion with disease in other organs, resulting apparently from the impaction in their vessels of fragments separated from the growths. These results divide themselves naturally into two classes, according as they arise from the impaction of smaller or larger fragments. With regard to the effects of the smaller *détritus*: For a long time anatomists have been familiar with large, yellow masses occurring in the kidneys, spleen, liver, and more rarely in the lungs. In the first stage they appear as hard, yellow nodules, taking their form, angular or round, from the structural arrangement of the organ in which they are seated; and circumscribed by a line of deep red injection, contrasting strongly with their own bright yellow colour. As time goes on, this line fades; the mass turns to a pale, dull yellow, and shrinks away from the surrounding healthy tissue; and we cease to recognise its structural identity with the organ in which it is embedded. Finally it is replaced by earthy matter, or suppurates, or is quietly absorbed, leaving a deep scar as an indication of its former existence. These masses are now generally supposed to be due to capillary phlebitis induced by the impaction in the capillaries of fragments detached from the growths on the valves. And in favour of this view I call to mind a case where, in connexion with extreme disease of the pulmonary orifice, they were found scattered through the lungs. However, they occur sometimes independently of valvular disease.

It seems strange that our experience of the effects of the impaction of larger fragments detached from the valves of the heart, should refer almost exclusively to obstruction of the vessels at the base of the brain. This, however, is mainly due to attention having been called to the part by the cerebral symptoms during life, and a change being thus looked for and detected which might otherwise have readily eluded observation. In this recent addition to our knowledge, we seem to have found the explanation of a form of hemiplegia differing from that dependent on cerebral apoplexy, no less in its requirements of treatment than in its pathology.

There remains to be noticed a form of obstruction peculiar to the right side of the heart, or nearly so, which is of even more vital importance than occlusion of the arteries at the base of the brain. The conditions predisposing to such an occurrence, are, inflammation of some portion of the venous system; and, as I think, a fixed position on the back: at least, such are the circumstances under which this obstruction commonly occurs. Cases of sudden death from this cause are frequent enough to make us familiar with the very characteristic symptoms. One sudden, violent attack of dyspnoea, and all is over in a few minutes. Almost before we knew that there was anything to apprehend, a mere choking, as it were, grew into a struggle for life. Not always a hopeless struggle; for by the side of the clot—the embolus, as it is called—which, by shifting its position, has caused sudden death, may sometimes be seen the shrunken remains of another clot which has been launched at an earlier period. Adherent to the walls of the pulmonary artery, or caught in the threads of

the tricuspid valve, we may find the explanation of another similar attack, from which some fortuitous mechanical disposition alone averted a fatal issue. Regarded from this point of view, a sudden attack of dyspnoea is always an alarming occurrence in a bed-ridden patient, even though the present distress and danger may have passed quite away; for dissection, which shews that the danger may be got over, shews at the same time that it is very likely to recur,

### III—AFFECTIONS OF THE MUSCULAR SUBSTANCE OF THE HEART.

Whatever importance we may attach to the exact diagnosis of the lesions of each valve, a little observation shews that no particular series of symptoms are connected severally with each of these. It is not the specific valvular lesion which determines the course of the disease, and gives it its characters, so much as the power of the various organs and of the constitution to counteract the injurious effects of the mechanical imperfection of the valve. Sooner or later, the organs and the constitution give way. The organs cannot act properly under the constant oppression of venous congestion. The blood, which leaves its watery part at the places where the circulation is most impeded, to take it up again where and how it best may, is unfitted for its various offices. And so the system breaks down at all points, the secretions are interrupted, nutrition fails, the dropsical tissues slough under pressure, and life fails at last under the protracted distress. Here are symptoms which a mechanical remedy seems ill adapted to contend with; and, indeed, these symptoms are themselves mainly due to the action of the only remedy which nature can apply to the mechanical disease. Yet, so long as the other organs remain sound, and able to bear the additional load, it is surprising to what an extent nature's simple mechanical expedient of strengthening the heart to meet its difficulties does succeed. Our remedial measures are, for the most part, limited to encouraging this or that secretion, and to tempering the physical condition of the blood, as best we can; but the measure of our success or failure, the index hand which points on the declining scale the progress of the disease, is the condition of the muscular structure of the heart.

Two words familiar by constant use, "hypertrophy" and "dilatation," denote respectively whether the heart is rising to meet its burden by increased growth and strength, or whether it is failing under the pressure. Both of these conditions are, to a certain extent, combined in almost all cases, certainly in all advanced cases, of valvular disease; but the one or the other predominates, according to the mode in which the heart feels the obstruction. So long as the different organs will bear the uneven pressure of an hypertrophied heart throbbing to drive the blood through a strictured orifice, life may continue; or so long as the heart can enlarge to receive the blood which would otherwise oppress the venous system at each moment of the least disturbance of the circulation, the end may be deferred. And it is wonderful to what an extent the organs of a child or of a healthy adult will bear this oppression. It is often the heart which is the first to break down; and, when the limits of nature's remedies have been reached, the first sign that the fatal downward progress has commenced is often found in the irregular rhythm of the oppressed and overburdened heart.

These processes of hypertrophy and dilatation have been correctly designated as reparatory; for though, after a certain period, they become diseases in themselves, still, but for their timely aid, life would have failed long before this period. We may do something to prevent or delay these conditions ensuing; but, once established, we must regard them as necessities, were it even in our power, which it is not, to remove them. But the muscular tissue of the heart has certain diseases of its own, not absolutely peculiar to it, but affecting it with great frequency; and, in connexion with its functions, having a peculiar importance. I allude more particularly to fibrous and fatty degeneration, of which our recent more perfect knowledge is to be counted among the most valuable contributions of the microscope to pathological science.

Fibrous degeneration occurs chiefly, but not exclusively, in connexion with mixed hypertrophy and dilatation, affecting by preference the thinner portions of the heart's walls. The muscular tissue, under these circumstances, becomes hard and elastic; the cavity retains its shape when cut open; the muscle creaks under the knife; and the cut surface looks paler than natural, but of a white rather than a yellow hue. And under the microscope the explanation of these changes appears in the substitution or the addition of an unusually large amount of fibrous or fibro-cellular tissue.

Now the word "degeneration" does not fairly apply to all the conditions under which this change is found to occur. The youth and strength of the patients in whom it is most commonly found, and its habitual connexion with hypertrophy, would make one rather refer it to active nutrition. In accordance with this view, in such cases the struggle for life, the resistance to death, is generally strong, and the suffering severe and protracted.

Its occasional connexion with the results of previous inflammation, ensuing in obliteration of the pericardial cavity by thick, unyielding adhesions, is an equivocal instance, not to be claimed absolutely as either an active or a passive pathological process. Under all other circumstances it generally contrasts strongly with fatty degeneration, and must be clearly distinguished from the simple atrophy of enfeebled muscle. For the design of this fibrous transformation is palpable: it is the substitution of a mechanical for a vital resistance to dilatation. Such a change I have found in the neck of the uterus ruptured during labour. Here, under the pressure of the uterine muscular tissue, the adventitious fibrous tissue, which could not dilate, was torn across. The pressure of the heart's contraction is probably not so great as, and its function is widely different from, that of the pregnant uterus; so the results are not as terrible. Hearts which have undergone fibrous transformation are not liable to rupture. But, while this change resists dilatation most efficiently, at the same time it limits the contraction of the chamber of the heart thus involved, and reduces it so far to the condition of a mere containing vessel.

Fatty degeneration, I have said, stands in the strongest contrast to the change last described. It is more frequent and more familiarly known. It comes more prominently under notice, not merely as a supplementary observation after death, but as the cause of symptoms which we watch during life; and it is not unfrequently the apparent cause of sudden



death. It has, besides, a more lively present interest, from the fact that its pathology has been—indeed, I may say is still being—worked out in our own days; for its very frequency and familiarity suggest questions as to its pathology and clinical history which have been as yet imperfectly resolved. And if, in this brief summary of heart-disease, so large a space has been allotted to this single subject, I feel that this is in but due proportion to the amount of study still devoted to the elucidation of the pathology of fatty degeneration.

Fatty degeneration of the heart, in the sense in which this term is strictly employed, is essentially atrophy of the muscular structure of this organ, and quite distinct from fatty accumulation in and about the heart; but it differs from ordinary atrophy most characteristically, in the fact that the muscular tissue is not removed, as usually happens under such circumstances, but is replaced by fatty matter, fibre for fibre. It is easy to follow, step by step, this gradual disintegration of the higher tissue, and its replacement by a more degraded animal substance. The little yellow, zigzag specks which just catch the eye; the soft, tawny, muscular walls which a practised hand feels to be diseased, are at once resolved, under the microscope, into infallible signs of one of the most subtle and dangerous diseases of the human frame. We may trace, in different portions of the same heart, all the successive stages, from the first change in the appearance of the muscular fibre to its complete disorganisation. First, the transverse striæ, always less distinct in the heart than in striped voluntary muscle, lose something of their clearness, and the fibres often become short and brittle. Next, the transverse striæ are replaced by longitudinal dotted lines; and lastly, all traces of organic arrangement are lost; nothing remains but the sarcolemma, irregularly filled with an amorphous fatty matter, or with distinct oil-globules, or shrunk after the discharge of the free oil-globules which crowd the field of the microscope.

So far the microscope, and so far with certainty. But, as to the pathology of the affection, as to the intimate nature of the process by which muscular fibre is replaced by oil-globules, and the exact period when this change commences, there is no such certainty.

It has been said that the decomposition of muscular tissue may be so regulated that the ultimate result shall be fatty matter; and it has been suggested that the transformation which takes place in the living body is the same as that which we can induce artificially by these means: in fact, that fatty degeneration is a physical, and not a physiological or pathological process.

The experiments conducted for me by Mr. J. Peel with all conceivable exactness, have not justified this view. I subjoin an account of these experiments in detail; for the present I will merely recapitulate the results at which we have arrived, and which seem incompatible with any purely chemical theory of fatty degeneration.

We found the excess of fatty matter in a fatty heart to consist of oleine, not of margarine, which is the normal fatty constituent of the human heart. Adipocere was proved to be by no means chemically identical with animal substance which had undergone fatty degeneration. It was merely a soap of lime combined with the fatty acids preexisting in the

tissue. There was no new fatty acid made—as is the case in fatty degeneration—during the change into adipocere, no substitution of oleates for margarates; and, indeed, it seemed that we could prevent the formation of adipocere altogether by carefully excluding lime during the process. We submitted weighed portions of muscle, in which the quantity of fatty matter had been previously determined, to more than one process for making adipocere, and carefully analysed the results. In no instance was the fatty matter found to have been increased during the operation. On these grounds I cannot doubt that adipoceros transformation is a saponification, not a degeneration; and that fatty degeneration of the heart is a pathological result not attainable by any of these chemical processes.

Commencing decomposition simulates very closely that change in the heart's muscular structure, which is known as the first or granular stage of fatty degeneration. I have been deceived by it myself; and such a mistake is all the more likely to occur, because granular degeneration, like decomposition, may involve the heart uniformly over a very wide extent; much more widely than distinct fatty degeneration ever does, probably because the destruction of the muscular fibres is less complete. This same uniform appearance of granular degeneration is also highly characteristic of the effects of maceration in dilute spirit, on the muscular structure of the heart; but it is not really fatty degeneration. Ether only clears these fibres of some of the granular dottings, it does not entirely remove this appearance, still less does it empty the sarcolemma. Further, chemical analysis of a portion of heart which has undergone this granular degeneration during life, shews but a slight increase in the normal quantity of fatty matter. This change is the first step, both in the chemical transformation into adipocere, and in the pathological replacement of the muscular fibre by oily matter; but it is not itself fatty degeneration. These dots are not oil-globules, but the signs either of an integral change, on which fatty degeneration is subsequently engrafted; or, if so it should be, of commencing decomposition.

The general conditions with which fatty degeneration of the heart is found to coincide, are, for the most part, those with which we connect muscular atrophy and fatty degeneration of other organs. Such are phthisis, hæmorrhage, debility from long mental or bodily suffering, and the effects of indolence or intemperance. The cases, however, with which we are here chiefly concerned are those where the heart does not so much share in the general decay, as the decay begins at the heart, where the wheel is broken at the very cistern, as it were. Sometimes, while all the functions are regularly performed, the heart alone of all the organs is undergoing this fatal change; and the first intimation that anything has been going wrong is the sudden death of a seemingly healthy man. A gradually accumulating experience has, indeed, given us some general grounds for conjecturing the existence of fatty degeneration of the heart during life; and sudden death from this cause rarely comes altogether without warning. Still the fact remains, that in this decay the heart will often outstrip all the other organs, and will fail from a form of disease against which one would have thought that its own functions, its own constant activity, were the best preservatives.

We are not in a position to say precisely what is the cause of this peculiar change originating in the heart's structure. We know, indeed, that the heart is liable to undergo fatty degeneration in consequence of inflammation extending inwards from the pericardium; but such an occurrence is rare. Indeed, the habitual absence of all traces of inflammation of the lining membrane of the heart, in cases of fatty degeneration,—recollecting that this disease, as a rule, extends from within outwards,—negatives the idea of inflammation, in the common acceptation of the word, being its habitual cause.

Yet we cannot entirely dismiss the idea of inflammation as a cause of fatty degeneration of the heart, though the process which leads to this result has little in common with that which we familiarly know as tending to the exudation of coagulable lymph or pus. The aneurismal pouches which we find in the ventricles seem to originate in such a process. We see only the ultimate results over the prominent part of the sac; but at the edges, where it adjoins the healthy muscular tissue, we gain some insight into the nature of the process by which these results are reached. And here the zone of intense congestion points to excessive vascular action, to give it no more exact name, as the cause of this change of structure. One such case occurred in a girl, fifteen years of age, who had been ill only one month, and had suffered from heart-symptoms during only a fortnight. And here the congestion was most intense at the line of union of the diseased and healthy tissues. Whatever share, however, this excessive vascular action may have in the process, the real analogies of acute fatty degeneration of the heart are to be found, not in inflammation of any organ, but in yellow atrophy of the brain and yellow atrophy of the liver; both essentially acute fatty degenerations.

Perhaps few pathological principles have met with more prompt and general acceptance than fatty degeneration of the heart in all its bearings; for, while it offered a sufficient explanation of much that had before seemed perplexing, it contradicted no known and established doctrines. Subsequent clinical experience has confirmed and extended the earlier deductions, and extends them still; and if yet there is a feeling of disappointment because angina pectoris has not received a full explanation from our present knowledge of fatty degeneration of the heart, is not this partly because cases of angina pectoris have seemingly become more rare, from the greater precision which the knowledge of this anatomical change has introduced into the nomenclature of cardiac disease?

Only one word more in conclusion. I have dwelt, in this very brief summary, chiefly on such parts of the subject as seem at present to be engaging attention or demanding inquiry; rather on the outskirts of the growing field of our knowledge, as it were, than on what has been reclaimed as a permanent acquisition to science. When, as years go by, perhaps some one shall return to this subject on such an occasion as the present, though some of the opinions which for the while seem reasonable may have been shewn to be wrong, yet I cannot doubt that much of the labours of the present generation will be permanently embodied in that still larger and better knowledge of cardiac pathology which I venture to anticipate.

## APPENDIX.

### A CHEMICAL INVESTIGATION OF THE PATHOLOGY OF FATTY DEGENERATION.

In the preceding address. I have expressed my opinion that the process of fatty degeneration, by which the muscular structure of the heart is changed into fat during life, is essentially a pathological, a vital, not merely a chemical process. I propose, in the following remarks, to examine at greater length than the nature of a general address would allow, the evidence on which this opinion has been based. The chemical analyses on which I rely have been performed for me with the greatest care by Mr. James Peel, Dispenser to the Sussex County Hospital; and my best thanks are due to him for the zeal and accuracy with which he has carried out the inquiry, and conducted all the experiments which I had devised, or he had himself suggested.

There are three questions to be solved: *i.* What are the chemical results of fatty degeneration of the muscular substance of the heart? *ii.* Can these results be obtained by acting chemically on the healthy muscular substance of the heart, by any of the methods employed to form adipocere? *iii.* What is the nature of adipocere, and what relation does this so-called result of chemical fatty degeneration bear to the result of pathological fatty degeneration? If the answers which I have obtained to these three questions are to be trusted, the inference seems certain, that fatty degeneration and adipocerous transformation are two different processes, dissimilar both in their results and in the steps by which these ultimate results are arrived at.

The muscular tissue for experiment was cut into small pieces, picked as free from adipose tissue as possible, and dried by pressure in a clean cloth. Five hundred grains were then taken for immediate analysis; an equal quantity was placed in one of the decomposing solutions; and the rest was placed in a corresponding solution, for the purpose of trial during the progress of the experiment. For analysis, the muscular fibre, whether recent, or after the chemical decomposition, was finely divided by trituration in a mortar with clean sharp sand, and exhausted repeatedly with ether. The ethereal solution was filtered, evaporated to dryness, and the nature and weight of the extract determined.

*i.* What are the chemical results of fatty degeneration?

The amount of fatty matter present in seemingly healthy hearts varied from 0.22 to 2.14 per cent., the mean of seven observations being 0.916. Excluding two observations which contrasted strongly with the rest, the extremes were, 0.22 and 0.54; the mean of these five observations being 0.455. I must observe that these two hearts were not especially chosen as healthy hearts, but as the first two specimens available for the chemical operations which had been determined on. Probably they were fat hearts.

In two hearts marked as granular, the fatty matter constituted 0.48 and 2.0 per cent. of the mass experimented on, the mean being 1.24 per cent. One marked as distinctly fatty contained 2.74 per cent. I remember that the greatest care was taken in this case to pick out any portions of adipose tissue from the substance to be analysed; so that the amount of fatty matter found on analysis is rather below than above the truth.

Now, though the percentage of fatty matter in a



heart not marked as unhealthy differed very little from that in the fatty heart,—as little, indeed, as 2·14 from 2·74,—yet the nature of the fatty matter was very different in the two cases respectively. In the healthy heart it was hard, dry margarine, while in the fatty heart the crystals of margarine swam in the oily part of the extract. One of the granular hearts displayed in a less degree this same excess of oleine. The fair inference seems to be, that in fatty degeneration of the heart the fatty matter is increased; and that this is mainly due to an increase of the oleine, which enters only to a small amount into the composition of the fat of a healthy human heart.

II. Can these results be obtained by acting chemically on healthy muscular substance of the heart, by any of the methods employed to form adipocere?

Three methods were followed; namely, the long-continued action of slowly running water, soaking in dilute nitric acid, and soaking in dilute alcohol.

1. All our attempts to convert a definite quantity of muscular fibre into adipocere by a slow stream of water failed. When the meshes of the net containing the weighed muscle were fine, they became clogged, and prevented the free access of water, and the muscle putrefied. Coarser meshes allowed fragments of the softened tissue to escape. After varying the form of the apparatus several times to no purpose, we gave up this part of the inquiry. Incidentally a curious result was obtained. Some loose fragments of muscle, laid in a dish with common water from the tap, containing lime in solution, were converted into adipocere. Some other similar fragments, laid in distilled water, underwent no such change until pieces of bone were laid in the distilled water, when the formation of adipocere immediately began. However, notwithstanding all our care, none of the experiments with weighed portions of muscle, of which the fatty constituents had been previously determined by analysis, succeeded.

2. A portion of the muscular substance of a heart which had previously been found to contain 2·14 per cent. of fatty matter, chiefly margarine, was left to soak for twenty months in dilute nitric acid, sp. grav. 1·42 (1 to 16) in a stoppered bottle. At the end of this time the fatty matters were found to amount to no more than 1·1 per cent. of the five hundred grains operated on. The mass had been changed into a substance having the smell and appearance of ointment of nitrate of mercury. The elements of the fat originally existing in the mass had been newly arranged under the influence of the nitric acid, part having assumed the form of an aromatic ether. Much of the fat had been destroyed; but never at any time during the process was there any evidence of the fat having been increased in quantity.

The muscular fibres generally retained their form, clearly recognisable under the microscope. The fibrils were broken off short into minute fragments; but each of these displayed distinctly either the transverse striae, or that longitudinal dotting which characterises the stage of granular degeneration already spoken of.

Again, two hundred and fifty grains of pure fibrine from bullock's blood, freed from all fatty matter by ether, were treated in the same way and for the same period. Not a trace of fat, of any of the oily acids, or of the results of their decomposition, could be found on analysis.

3. A portion of the muscular substance of a heart, which had been previously determined to contain 2 per cent. of fatty matter, was left to soak for eight months in dilute alcohol (1 to 7) in a stoppered bottle. As with the dilute nitric acid, this bottle was nearly filled with the solution, occasionally shaken, but

rarely, if ever, opened; and all observations were made on a similar trial solution. At the end of this time the mass was found to contain 1·92 per cent. of fat and fatty salts of whatever kind. The fat seemed to have been destroyed, to this extent, by the process to which the muscular fibre had been submitted.

To the naked eye, the muscle thus acted on appeared as a reddish, flocculent mass, in which the division of the fibres into bundles was indistinctly perceived. Under the microscope, however, all was obscure. A few granular fibrils could be picked out here and there; but the rest was an indistinct, flocculent mass, with something of a linear arrangement. It contained a few white, opaque grains with a radiating structure, apparently composed of a soap of lime. No loose fat appeared anywhere, and ether had very little effect in clearing the field.

The inference from these observations seems to be, that fatty degeneration cannot be artificially imitated by these methods. One step, indeed, adipoceros transformation and fatty degeneration seem to have in common, that which we recognise as the stage of granular degeneration; but, as chemical analysis shows that this appearance is not necessarily accompanied by any increase of the fatty constituents, we must regard it here as an optical change only.

III. What is the nature of adipocere, and what relation does this so-called result of chemical fatty degeneration bear to the result of pathological fatty degeneration?

To answer this question, adipocere was obtained from the different sources which the macerating jars of the Sussex County Hospital Museum supplied, and from a large specimen in the Museum of the Royal College of Surgeons. For the liberality with which my wishes were met, and a portion of this specimen placed in my hands for analysis, I beg to express my sincere thanks to the Committee of the College Museum, and to their zealous Curator, Mr. Flower, whose kindness on this, as on other occasions, I have much pleasure in acknowledging.

1. Adipocere obtained from the neighbourhood of the bones of the head of a sword-fish, was found to be composed of margaric and oleic acids; the latter in excess, combined with lime. There was a small quantity of unaltered fat and of free fatty acids, also some nitrogenous matter undecomposed.

2. From adipocere which had gathered round human bones, the same general results were obtained; only the margaric acid salts preponderated over the oleic, and the saponification seemed more complete. This last result seemed due to the longer time during which the specimen had been macerating. The adipocere obtained from these sources, and from a mass of human muscle, burned with a clear flame, leaving a white, alkaline ash; but the fat from fatty hearts burned entirely away without any residue.

3. A portion of adipocere from the human thigh (prep. No. 1832d, Mus. Coll. Surgeons) was submitted to a most careful analysis, to test in some way the accuracy of the previous observations. It was composed of white, stringy fibres powdered over with a dry substance, which lay partly between the bundles of fibres, and partly in distinct masses. This substance had no definite form, and only obstructed the view of the fibres to which it adhered. When it was removed by ether, or more completely by cold liquor potassæ, regular fibrous tissue, just such as is seen in muscular fasciæ, came into view. A very little heat sufficed to gelatinise this tissue.

The nature of the different constituents having been determined on separate portions, an exact

quantitative analysis was made of ten grains of the specimen, giving:

|   |      |
|---|------|
| Free margaric and oleic acids   | 4.1  |
| Margarate and oleate of lime, with traces of magnesia                 | 2.4  |
| A peculiar fibre, containing nitrogen and traces of phosphate of lime | 3.4  |
| Water   | 0.1  |
|   | 10.0 |

In the fatty matter here present, margaric acid so predominated that it was necessary to add olive oil to allow it to crystallise freely in its characteristic form. In this, as in all other respects, this adipocere agreed perfectly with other specimens of adipocere from the human subject, and contrasted strongly with the results of fatty degeneration.

To recapitulate these conclusions. The muscular tissue of seemingly healthy hearts contains a variable amount of fatty matter. In the condition known as granular degeneration, pathologically induced, the quantity of fat and the proportion of oleine is slightly but not constantly increased. In the same, artificially induced by decomposition, there is no such increase. In advanced fatty degeneration the quantity of the fat and the proportion of the oleine to the margarine is much increased.

The common method of obtaining adipocere from muscular tissue, namely, by the action of running water, gives no results accurate enough for the basis of a quantitative analysis; but two other methods, namely, by the action of dilute nitric acid and of dilute alcohol, are readily available. By these reagents fat is decomposed, and saponified if the bases be present; but there is no evidence that fat can be made by either of these methods, or that one kind of fatty acid can be changed into another.

It would be too much to say, that under no circumstances whatever can fatty matter be formed from muscular fibre by a purely chemical process: at least it was not so formed here in these most carefully conducted experiments. And the analysis of adipocere does not favour the belief that it is a newly formed substance, but rather that it is a new arrangement of the old materials, a saponification of the fat already existing.

Adipoceros transformation, then, if I am right in these conclusions, is altogether different from fatty degeneration. The one is a chemical change of dead, decomposing matter; the other is a pathological process, and the part which chemistry plays is, as in inflammation and secretion, subordinate to the influences which are at work, however feebly, in a living body.

**DANGERS OF GIVING MEDICAL CERTIFICATES.** James Day was lately charged with violently assaulting and threatening the life of Mr. John Hackney, surgeon, of Myddelton Square. The prisoner assaulted the complainant because he had signed a certificate in which he stated that the prisoner was of unsound mind. The prisoner said that all the surgeons had entered into a compact to annoy him. The surgeon at the House of Detention reported that during the time the prisoner had been confined there, he had been remarkably quiet, but he seemed to have a delusion that every one was following him and annoying him in consequence of the certificates that had been signed by the complainant and the other surgeons. The prisoner said that he did not want to murder the complainant. Mr. D'Eyncourt committed the prisoner for trial.

## Abstract of Lectures

ON THE

### PROGRESS OF SURGERY DURING THE PRESENT CENTURY.

*Delivered at the Royal College of Surgeons.*

BY

WM. FERGUSSON, Esq., F.R.S.

[Reported and Annotated by T. HOLMES, M.A.Cantab.]

#### LECTURES V AND VI.

MR. FERGUSSON'S concluding two lectures were occupied with the subject of Excision of the Knee; and as these two formed really only a single lecture, we shall treat them together. The subject is one which belongs in so peculiar a manner to Mr. Fergusson, that he could hardly be expected to speak with perfect impartiality about it. Indeed, he candidly confessed as much in a passage with which we cannot but entirely sympathise.

"The subject has still to be dealt with fairly and dispassionately. I doubt if I can do either, although, possibly, having the largest personal practical experience on it of any man living. I fear that I am prejudiced; albeit my efforts in public practice have been made with the hope that, by encouraging others to undertake the operation, I might one day be able to say with more forcible authority that the proceeding is one which should be either abandoned or adopted in the practice of surgery."

This passage touches, indeed, upon the chief cause of the differences of opinion which still exist upon this subject; viz., that it has not usually been dealt with fairly and dispassionately. Some, indeed, of the surgeons who have written in favour of excision of the knee-joint, have done so in much the same tone and spirit which political partisans assume in defence of their party and in vilification of all those who oppose it; and they have supported their advocacy by arguments which have turned out so fallacious that persons whose feelings were less warmly concerned in the matter have been repelled. Mr. Fergusson, however, we are bound to say, was both more moderate and more reasonable in his advocacy; although, even in his lectures, the unfounded assumption so common in the arguments on this subject was constantly peeping out; viz., that there exist some surgeons who have a sort of constitutional predilection for amputation. Now this, we take leave to say, is not so. No one would amputate a limb for the love of the operation; it is only done because, in the judgment of the surgeon, the attempt to preserve the leg and foot by means of excision is not likely to succeed.

Mr. Fergusson's efforts have most satisfactorily established the feasibility of excision in certain cases; and there is no general hospital in London where the operation has not been performed. But the result of the experience of London hospitals, as far as it has gone, and the result of Mr. Fergusson's hospital practice in particular, has been to show, as conclusively as the extent of that experience allows, that the operation is a more dangerous one than amputation. Therefore, starting with that idea, hospital surgeons ask themselves, in each case of knee-joint condemned to operation, whether the probable



advantage to the patient of the preservation of the foot is equal to the increased risk of the operation; and when they answer the question in the negative, it is from no perverse delight in mutilating their patient, but from the conviction forced upon them by recorded experience of the greater risks and uncertainties of excision.

We must endeavour, then, so to analyse Mr. Fergusson's remarks as to see what his ample experience has enabled him to tell us upon each of these points: 1, the risks of the operation; 2, its uncertainties; 3, its advantage; compared in each case with amputation. We say, compared with amputation; because in every case of diseased knee-joint, the first question which occurs is whether any operation is required. This part of the question was very lightly passed over by Mr. Fergusson in the following words.

"What, I ask, is the alternative for excision of the knee proposed by those who object to this operation? It is amputation in the thigh! I cannot allow that which might be an easy answer to the question—Why perform an operation at all? Why not cure the disease, and thereby avoid amputation? That is a question of a totally different kind. I am not now discussing the question of amputation, or continued, and possibly other treatment, to save the limb. It is the question between excision and amputation."

We do not complain of this summary dismissal of the most important part of the question, since that view of the case did not come within Mr. Fergusson's programme; and the two lectures before us are, therefore, to be taken merely as a discussion of the respective merits of amputation and excision for such disease of the knee as absolutely demands operation. Yet it is quite clear that it is very important, even in estimating the mortality after the two operations, to know what were in each case the indications for operating. When we are told that a country surgeon, with a small hospital, and a small population to draw from, excises the knee for chronic disease more frequently than most surgeons of large hospitals, and with a large population to draw from, perform amputation for all causes, we cannot resist the suspicion that the former surgeon has recourse to operation at an earlier stage of disease than the latter; and that, besides other causes of difference, his operations may have been performed on patients more likely to recover from operation, because really in less need of it. Our readers will find in *L'Union Médicale*, May 24, 1864, an article by M. Forget, on Excision of the Knee, in which he has become so interested in the question of avoidance of operation, that he forgets the other question altogether, until at length the reader might be tempted to believe that in France limbs are never sacrificed on account of disease of the knee. This, however, is not the subject which Mr. Fergusson here deals with. He assumes that, in every case, whether of amputation or excision, the indications for removing the diseased joint have been absolutely decisive; and he assumes, also (at least, he says nothing on the question), that the surgeons who have chiefly practised excision, have not been more hasty in applying that operation than those who have practised amputation. Let us see, then, what Mr. Fergusson has to teach us, as to the dangers and advantages of the two operations.

1. With respect to the comparative danger to life; in Mr. Fergusson's lectures, the reader will notice a great alteration from the boastful tone which was at first adopted by the indiscriminate advocates of excision. On the subject of the relative mortality, Mr. Fergusson made the following cautious remarks.

"The largest number of collected and original cases

with which I am acquainted, was made some years ago by my friend and former assistant, Mr. Price. The list amounted to nearly 250; and went to show that the fatality was pretty much the same in excision of the knee and amputation in the thigh. I do not think that, as yet, we have data of greater importance on this point. The success, or want of success, of amputation in the thigh, as detailed by Mr. James of Exeter, Mr. Bryant of Guy's, or Mr. Callender of St. Bartholomew's, can have no direct bearing on this question, until a like number of cases of excision of the knee in the same or similar institutions can be brought to bear on the point. There is nothing in physiology, anatomy, pathology, or practical manipulation, which should make this operation more hazardous to life in proportion to amputation in the thigh, than excision of the elbow is in proportion to amputation in the arm.

"My impression is, that excision of the knee is, or should be, by proper treatment, as little destructive to life as amputation in the thigh; and if this be proved and granted, as possibly it may be in time, then I firmly believe that all other objections to this operation must pass away like those which so long retarded the application of excision to the elbow."

With respect to his own experience, he stated that he had himself operated on forty cases, and that fifteen of these had died. To balance this great mortality, he referred to the practice of other surgeons, as Mr. Jones of Jersey, Dr. Humphry, the surgeons of the Exeter Hospital, etc., who had treated a smaller number of cases with a less percentage of deaths; and he very candidly confessed that the great mortality in his own practice might possibly have occurred because he had been "too zealous, and resorted to the operation when he should have selected amputation." But, though Mr. Fergusson's advocacy of his favourite operation was skilful and obviously sincere, an auditor accustomed to the subject might notice the omission of some topics most essential to a proper understanding of the matter in argument. In the first place, has the comparison of death-rates after excision and amputation been made between similar cases of each operation? That is to say, if the mortality after excision of the knee at Cambridge or at Exeter is fairly represented by the death-rate hitherto obtained there, is that death-rate higher or lower than that of amputation of the thigh performed, for similar causes (viz., for chronic affections limited to the knee-joint), by the same surgeons (therefore, with equal skill, and presumably equally strong or weak indications), and on patients in similar circumstances of constitution, hospital atmosphere, etc. We know perfectly well that, both in London and in country hospitals, the mortality after amputation for chronic disease of the knee is trifling, especially if the patients be of sound constitution. Mr. Bryant showed that, for a series of years at Guy's Hospital, such amputations had been fatal only in one case out of seven. The present writer showed that the very same proportion had prevailed for a series of years at St. George's Hospital. At the smaller rural hospitals, if short series of cases of excision of the knee sometimes occur without any or with very few deaths, the same may, also, be said of amputation. Thus, in Addenbrooke's Hospital, Cambridge, for the years 1860-61 inclusive, while, out of eight cases of excision of the knee, three died after amputation,\* eleven other cases of amputation of the thigh for disease did not furnish a single death. So, at Exeter, there appears to have been not a single death after excision

\* This was an exceptional case of bad fortune; but such bad fortune will occur in almost all operations, if only the experience is sufficiently protracted. The period was subsequent to the publication of Dr. Humphry's paper on the subject.

of the knee, and only one consecutive amputation; although a record of nine cases has been preserved, and probably others occurred; but, then, neither is there any record of a death after amputation of the thigh for disease, in the same period. At Plymouth, again, no deaths took place after amputation of the thigh, in the years 1860-61, during which twelve cases are on record; and here the operation of excision has not been found very successful. In fact, reasoning from facts so imperfect and so inconclusive as these, can never lead to a sound conclusion. The present writer endeavoured, some time ago, to collect the experience of the London hospitals on the subject; but was baffled by the want of any information at many of them; amongst which King's College Hospital was conspicuous by its utter want of authoritative information, although I had to thank Mr. Fergusson for most kindly assisting me to procure such private information as was available. The attempt resulted in my procuring an account of ninety-five miscellaneous cases, out of which nearly one-third died; and the operation in this, or some other, way was known to have proved a failure in about one-half. (*British and Foreign Med.-Chir. Review*, July 1862.)

Now, these statistics, as far as they go, do not appear open to the above objections. The numbers are sufficiently large to show an average. The operations were performed, as Mr. Fergusson says, "in the same or similar institutions" to those which furnish our data for mortality after amputation. The collection, although it is not complete (that is to say, does not include every operation that was performed), is miscellaneous and free from all selection; and, therefore, probably represents what was the real ratio of success. And that this success is far below that of amputation, for similar causes and under similar circumstances, needs no argument. I think, then, that it may be accepted as proved that, up to the present time, the gross mortality and the gross total of failure, from all causes, after excision of the knee, has been far greater than after amputation of the thigh. Mr. Fergusson took little notice of this point beyond saying:

"Even with the fatality following my own personal experience, I am not disposed to take an unfavourable view of the operation; for, looking to all that I have seen and done as regards amputation, I hesitate to say if I should have been successful in saving life to a larger extent, in the same individuals, had amputation been resorted to."

Surely, here Mr. Fergusson's argument ran away with him. He can never mean seriously to tell the profession, that fifteen out of forty is an average loss after amputation for chronic disease of the knee at King's College Hospital.

Another point in estimating the mortality after excision which Mr. Fergusson omitted, was the relative ages of the patients. M. Forget, in the paper above referred to, shows that, in a table by Heyfelder of excisions of the knee, out of 154 patients whose ages are noted, 102 were below the age of 25, and that in these the proportion of deaths was about one in four;\* while, out of fifty-two persons operated on beyond that age (two only of whom had reached the age of 50), twenty-one died to thirty-one who recovered. Now, if statistical tables of amputation of the thigh in London hospitals were formed out of the same elements—that is to say, only of young persons whose limbs were removed for chronic disease—the mortality would certainly be far lower than even the

lowest average given by Mr. Bryant's or the St. George's Hospital tables; very much below one in four, therefore.

The reader may, however, consider that this matter has been already sufficiently argued, and that the conclusion is obvious to every impartial person; viz., that, as it has hitherto been practised, excision of the knee has been far more fatal than amputation of the thigh would have been in the same cases.

For myself, who, in my humble way, am a partisan and a supporter of all the operations of "conservative surgery" (but who wish to support them by fair arguments, and not by such as are groundless), let me be permitted just to hint, that this fact, which I believe to be established as a matter of history, by no means proves that it need be the same in future. This great and excessive mortality proceeds, as there is every reason to believe, from the fact, that the operation has been too indiscriminately performed; a consequence, very probably, of the delusive representations of its harmlessness which have been put before the profession; otherwise, though no one has yet shown any reason why excision should be less fatal than amputation, yet no one, on the other hand, has shown any distinct reason, except the greater length of suppuration, why it should be more so.

2. With regard to the second point—viz., the uncertainties of the operation as a curative measure—Mr. Fergusson's lectures were extremely suggestive and interesting. There is a very prevalent idea that the limbs preserved by excision are, in a great many cases, useless, and that amputation is often necessary. Mr. Fergusson attempts, here again, to reduce the uncertainties of the operation to the same level as those of amputation. Allowing, what is indeed unquestionable, that the period of cure is far longer after excision than amputation, and that during almost the whole period the patient is confined to bed, Mr. Fergusson, nevertheless, did not appear willing to concede the inevitable inference that, during this lengthened period of suppuration and confinement, the health of a patient, already weakened by long disease, is very liable to break down, and so the process of union is very liable to fail. That this is so, however, is proved, as far as anything can be said to be proved, by the past records of the operation, in which the list of consecutive amputations is a very formidable one, though, doubtless, far from complete. Another uncertainty connected with the operation, is the possibility of suspension of growth in young subjects.

"This matter was first hinted at in Dr. Humphry's paper, read before the Medical and Chirurgical Society in March 1858, and was more elaborately worked out in subsequent papers laid before that Society in 1861 and 1862. The same author has alluded to the subject in his valuable *Treatise on the Human Skeleton*, published in 1858; and he there comes to the conclusion that, in such instances, when the tibia and femur might unite by ossification, 'the objection urged against the operation might prove valid.'

"The union of physiology, science, and practice here has given great force to the observations of Dr. Humphry; but attention was still more prominently brought upon the subject by a remarkable paper published by Mr. Oliver Pemberton of Birmingham, in 1859. The main object of this paper was to show that, in a youth operated on for excision of the knee in 1854, the limb in 1859 was nine inches shorter than its fellow. Another analogous case is cited from the practice of Dr. Keith of Aberdeen, where, in the course of 'nearly six years, the deficiency of growth is measured by five inches'. To add to this objectionable feature in Mr. Pemberton's case, there was no bony union; and in Dr. Keith's case, at the

\* A misprint in M. Forget's paper prevents our quoting the exact numbers. Forty-two were below fifteen years of age, and of these only six died.



end of the time referred to, 'the union was not strong, and there was a bending outwards.'"

And other causes of uncertainty, to which the lecturer hardly alluded, are, that the limb may afterwards bend in consequence of the union becoming soft, or that the disease may be again lighted up in the parts concerned in the operation. Now, against all this formidable array of drawbacks, Mr. Fergusson is disposed to set the occasional drawbacks to the perfection of the stump after amputation.

"The occasional evils of secondary hæmorrhage, of unusual retraction, of scanty covering, of chronic sore therefrom, of caries or necrosis, of tender cicatrix, of neuroma on the great nerves, and of secondary operative interference, have all been in a manner ignored in this comparison. And yet how often have all men of experience seen cases of the kind."

These evils Mr. Fergusson believes to equal the uncertainties of the operation of excision. How far his surgical audience were inclined to follow him in that conclusion, we know not. Anything like a statistical record of cases of imperfect stump has never yet been attempted; but our impression was, that such cases were not numerous in any kind of amputation, and less common in amputation of the thigh for chronic disease of the knee-joint than in almost any other sort of amputation, seeing that in this amputation both the soft parts and the bone are usually quite healthy, and the latter covered by a plentiful cushion of flesh. It is surely rather in amputations in the leg, and especially in those performed on account of injury or its secondary results (where either the flaps or the bone have probably suffered more or less), or for diseases affecting either the skin or the bones to a considerable extent, that the evils enumerated by Mr. Fergusson are wont to show themselves. The attempt to balance against each other things which to ordinary apprehension have so little proportion, seemed to show that Mr. Fergusson felt himself hard pressed in his endeavour to show that excision of the knee was neither more dangerous, nor more likely to prove only an imperfect cure, than amputation.

3. But, allowing this, let us next see whether the lecturer could adduce any such advantages for the ultimate result of excision as should justify its increased dangers and risks. Here we must say that Mr. Fergusson appeared to us to stand upon much firmer ground, and not only spoke with a power which hardly admitted of doubt, but, what was much more to the point, showed the models, the drawings, and the living subjects of his operations, as well as those of other surgeons, to prove what is the difference between the result of a successful excision and an amputation. The lecturer was, we think, in error in saying that, though a comparison had often been drawn between the excised limb and its healthy fellow, no one thought of drawing a comparison between the excised limb and a wooden leg. At any rate, we may refer to the above named paper of M. Forget to show that they have mooted the question in France. He quotes the following opinion of M. Velpeau.

"It is not on account of its difficulties that excision of the knee ought to be proscribed, but rather because it is more painful, more tedious, more dangerous, whether immediately or secondarily, than amputation; and, above all, because, in the most successful cases, the limb which is preserved is really less useful to the patient than an artificial limb. The joint cannot be reestablished; and the leg, if it preserves the faculty of motion, moves only very irregularly, and remains bent strongly outwards." (*L'Union Méd.*, May 24th, p. 355.)

The expression of such an opinion by one of the most eminent surgeons in France, and still more its quotation as decisive and authoritative by so respect-

able an authority as M. Forget, show conclusively how little is known about the operation in Paris. Compare the poor mutilated wretch, who cannot get out of bed and stand for three minutes without support, or move across the room unless he hops or uses a crutch, or go about his ordinary business without screwing on a cumbrous apparatus whose mere weight prevents any agility or long continuance of exertion, with one whose operated leg is as sound and nearly as long as the natural one; who can walk twenty or thirty miles a day; can go chamois-hunting, like Heusser's patient; and, above all, is as good a man as ever he was in this particular, that he is always ready for whatever he allows himself to undertake; can spring out of bed and go into action at any call; needs no help from any one, and has not to expend a penny on any machinery. Really, to hear some surgeons talk, one would think that they imagine that their wooden legs, when once put on, grow to the patient's body and become a part of it, requiring no adaptation and no renewal, and occasioning no inconvenience and no expense. But the very idea of a comparison, to any one who has seen a really successful case of excision, is utterly absurd. The question becomes a serious one only in those cases where excision is but partially successful in saving life, but not in giving a perfect limb; where the leg is either so short or so flexible that the patient cannot put it to the ground. Even here, again, Mr. Fergusson expressed his decided conviction that the limb so preserved, though imperfect, was much better than any artificial substitute which could be manufactured; and he laboured to show that in Mr. Pemberton's well known case, where the limb was nine inches shorter than its fellow, and the union flail-like, the patient was in a better condition than with a wooden one. But, at the end of the argument, Mr. Fergusson was fain to confess that it was a matter of opinion, and he candidly recorded Mr. Pemberton's strong opinion the other way. Whatever may be thought as to the comparison when both defects are joined together, there can be little doubt that Mr. Fergusson proved his point so far as mere shortening is concerned. The drawing and history of the celebrated Harvey Leach, or Hervio Nano, a dwarf circus-rider, showed how great agility and power are compatible with shortened and greatly unequal limbs, since, in this man, one of the malformed limbs was sixteen inches long, the other only nine. Whether, however, the patient is better off than after amputation, when the limb is too flexible to allow him to stand on it, seems very doubtful.

Mr. Fergusson dwelt much on the analogy of the elbow, arguing that, as surgeons think a hand worth preserving, however ill the union may progress in the elbow, so a foot is worth preserving, however ill the union may go on in the knee. The obvious reply is, that the use of the hand is independent (at least, to a great extent) of the elbow; that of the foot is entirely dependent on a firm support above. If there is no solid union at the seat of excision (whether with or without motion is another question, but at least solid enough to bear the weight), surely the foot is more an encumbrance than a gain. However, Mr. Fergusson used a much stronger argument by stating it as the result of his experience, that many of these apparently unsuccessful cases can be cured by repetition of the resection. Amongst other cases, the following was adduced.

"Here is a fair example of the kind. A lad carried a limb bent at right angles, and walked laboriously on a crutch. Excision was performed. Things did not go on so well as I expected. Twice afterwards I had to renew the incision, and saw fresh surfaces on the bones. About twelve months afterwards, he left

the hospital with a loose dangling leg. But by-and-by ankylosis set in. It certainly cannot stand comparison with the other limb; but it contrasts favourably with such distortions as these (referring to some models of distorted limbs); and, as a proof of its vigour, the youth recently walked twelve miles to see the Derby run."

Such cases as these do indeed carry further the domain of excision; and others equally striking were brought forward, by which Mr. Fergusson showed with convincing force that many of the objections to excision, drawn from the defective condition of the limb sometimes left, might be obviated, if only the patient has the patience to submit to, and the constitutional strength to survive, the great length of confinement and repeated calls on his powers that a second or third repetition of the operation involves.

Having pointed out so much that was interesting, original, and valuable, in what Mr. Fergusson said on this subject, it may be allowed to us to regret that he omitted one very important part of the subject; viz., the indications for the operation. He himself allowed, in a passage above quoted, that the great mortality of his own operations may perhaps have been caused by a too indiscriminate selection of cases; and there can be little question that, if the mortality is to be brought down to or below the level of amputation, it must be by a more just idea of the powers of the operation; yet Mr. Fergusson spoke of it throughout as if its domain were coextensive with that of the more radical operation. Thus he spoke of Dr. Williamson's case of excision of the ulna with the elbow-joint, and of cases in which he had himself removed sequestra from the femur and excised the knee, in terms which would lead an uninitiated hearer to think that a large quantity of the shaft of the bone might be removed with good prospect of success. Is this so? If so, it is contrary to general opinion, and should be proved by cases. The instances of extraction of sequestra are not to the point, since the very formation of a sequestrum implies the cessation of active disease in the part, and the symptoms may be expected to subside after its removal. Dr. Williamson's case was, I find, not the removal of a sequestrum, as I previously imagined, but the *bond fide* excision of the shaft of the ulna, including new bone and sequestrum. But for what purpose this was done remains doubtful to those who read Dr. Williamson's account of it; while there is no doubt that the arm remained useless. Therefore, this case also is not to the point, as illustrating what amount of bone can be successfully removed in an excision. It has usually been held that, in caries, the disease must be limited to the epiphyses in children, and to the articular surfaces and their immediate neighbourhood in the adult, if the operation is to succeed; that, in necrosis, the operation of excision is not usually necessary, but that, if it be so, the existence of sequestra presents no objection to it, provided those sequestra be removable; that much disease of the soft parts forms an objection, though not a fatal one; that cases of acute disease and patients in weak health are unfitted for the operation; that, in cases of injury, it is seldom advisable; and, finally, that it is peculiarly, if not exclusively, fitted for late childhood and youth, since in early childhood most of the limited affections of the joint are curable without operation, and in later life the patient has not usually the power to bear the confinement and protracted suppuration, and the possibly greater shock. If these notions are correct, they would much limit the application of excision; and, although a tolerably wide field would still be left for it, yet the operation would be far from the universal substitute for amputation that a hearer of Mr. Fergusson might think it.

If, however, such notions are inaccurate, we regret much that Mr. Fergusson's ample experience was not used in correcting them.

On the whole, no one could doubt that these two lectures form a most valuable contribution to the literature of excision of the knee, and chiefly as showing how much may be done by patience and repeated operations in curing limbs which would otherwise be condemned to amputation. Whether the prospects of success in such treatment balance the risk and long period of confinement which it involves, is a point which must be left to be decided by more extended experience.

## Lettsomian Lectures

ON

### MIDWIFERY AND DISEASES OF WOMEN.

*Delivered before the Medical Society of London.*

BY

C. H. F. ROUTH, M.D.,

PHYSICIAN TO THE SAMARITAN HOSPITAL FOR WOMEN AND CHILDREN.

#### LECTURE III. (*Concluded.*)

##### THE TREATMENT OF FIBROUS TUMOURS.

What is then the conclusion to which the present analysis brings us? Gastrotomy for fibroid tumours should not be performed, except—1, in cases of extrauterine tumours; 2, in those cases where the tumour is high up in the false pelvis; and 3, not only must the whole diseased uterine mass be removed, but also the ovaries.

A last question remains for inquiry. What circumstances should lead us to interfere in cases of fibroid tumours at all? These conditions, I believe, may be included under four heads—

1. Where, by their rapid growth, they are threatening to interfere with vital functions.
2. Where, by their size, they are threatening to arrest micturition and defecation especially.
3. Where, by their size and pressure upwards, they are interfering greatly with respiration and the cardiac circulation.
4. Where hæmorrhage is excessive, and threatening to exhaust the patient by its quantity and frequent recurrence.

1. Some tumours will remain dormant for years. I have known of one which made no progress for nineteen years; but this was in an old woman. In advanced age, these tumours are not likely to make great progress. The period of uterine activity is always, as we have before seen, more or less concerned in their development. If all sense of comfort is lost, if this annoyance be on the increase, and if it appear probable that the development will go on, then there may be a reason for interference. The patient is then in better health than she will be; and, surgically speaking, is in a better condition to be operated upon than she can be at a future time.

2. If the functions of defæcation and micturition are interfered with, the suspension of both these functions, especially micturition, must ere long lead to fatal disease. We may, by injections regularly continued, assist defæcation. We cannot, if the



pressure be exerted on the ureters, enable the patient to make water. The ureters will dilate, and the kidneys ere long will be irremediably injured. The tape-like condition of the motions will indicate that the rectum is pressed upon. The constant desire to micturate, great backache high up, the alkaline and thickened condition of the urine, and generally its albuminous character and high specific gravity, will indicate that the bladder or ureters are pressed upon; add to which, the patient herself has a very urinous odour about her. There may be, in addition, some symptoms of poisoning by urea, a tendency to narcotism, and slight convulsive affections. The constant desire to micturate, and the small quantity of urine which can be drawn off by the catheter, give a greater colouring to such a suspicion; and this is certainly a case which warrants interference. It is also more likely to succeed, as in these cases the tumour is low down, and more get-at-able *per vaginam*.

In these two varieties, it is clear the operation should be by that passage.

In lieu of an operation, it has been suggested that it is advisable to push up the tumour by main force into the false pelvis, and so relieve the pressure on the vital organs; and Dr. Oldham has stated to me that he has effected this on several occasions with the best result. This is high and unexceptional authority. I wait, however, to see these cases published; as, in the absence of this information, we must all necessarily be incompetent to state to which *modus operandi* the preference has been given. In several cases where I have attempted to do so, I have failed, and could not have succeeded, except by the use of force which I should have feared to employ. In other cases, I have heard that peritonitis and death have resulted. Where there are adhesions, I should suppose the measure hazardous. If these do not exist, and there be impaction only, then the measure certainly ought to be tried first. If, however, the tumour be a cause of menorrhagia, this symptom is not likely to supersede other local measures to arrest those losses; and we have put our patient in that position, when to operate on the tumour becomes less easy. These, I think, are considerations to be borne in mind before we push up a tumour. On the other hand, there is this advantage from this course, if we succeed in pushing the tumour high up above the pelvis; if it then continues to enlarge, and if it thereby interferes with respiration and circulation, it is high up, and in the condition most favourable for extirpation. It is only where the compression on the bladder and rectum calls for immediate action, that we should act thus; and then, I fear, adhesions would already have been extensively formed.

3. Where the tumour, by pressure upwards, interferes with the free action of respiration and the heart, in these instances—at least, in all those I have seen—the tumour is situated above the true pelvis. In most cases, it is fibrocystic; and in several cannot be felt even through the vagina. Here we have the same indications which call for operation in ovarian dropsy, and they must be fulfilled in the same manner. Interference with these tumours *per vaginam* is more doubtful, because it is so difficult to reach them from below. Except with the double sound pelvimeter, diagnosis as to position in the wall is impossible. These are cases, therefore, in which it may be allowable to think of gastrotomy. Here also

we may expect to find the uterus and ovaries pulled up from the lower pelvis into the upper, and therefore more easily got away, because there would be less risk of wounding large vessels.

4. Lastly, where hæmorrhage is excessive, and threatening to exhaust the patient by its quantity and frequent recurrence, it may be justifiable to interfere. But even here the mode of interference must be different, according to the nature of the patient's case.

If the exhaustion be very great, if the anæmia present be very marked, then the use of the knife is contraindicated. We must recollect an exsanguine state is precisely that which renders a patient not only more liable to absorption of putrid matters, if once formed, but to their ready formation. In a patient of weak vitality, a growth of intrinsic deficient vitality will be more likely to slough. The power of a patient, under such circumstances, to resist or recover from an attack of pyæmia, is almost *nil*. Astringent remedies and tonics must first be given to prepare the patient, before more active interference is carried out; and it is precisely in these cases that Dr. Savage's method of previous dilatation by a sponge-tent, and subsequent injection of the uterus, is called for. This, as in a case I previously recorded, will allow the patient to rally for the time; and it is especially at the recurring menstrual periods that she must be watched and cared for. If, however, the patient be in a comparatively healthy condition, once the bowels having been regulated, incision of the os, or of the tumour, may be practised. This preliminary preparation by a course of depurative remedies is particularly useful in all operations upon fibrous tumours. Peritonitis and cellular abscess often follow upon interfering with them. I do not know that the former, if within certain limits, is not of ultimate advantage. I think I have seen it beneficial in promoting disintegration of the tumour. When it occurs, it is best treated by opium and calomel in small doses, injections of laudanum *per anum*, and turpentine stupes. At least, such has been my experience.

It is needless, in addressing a society of medical men, to insist upon these minor points; still less to dwell upon the necessity of operating only upon those patients who have no other advanced organic diseases which are likely to hasten a fatal termination. Upon one point only I wish to make a reflection; and it is, that I hold it to be morally wrong to operate upon cases of fibrous tumours against our better judgment, merely because a patient or her friends are clamorous for the operation. I make this remark, because I have heard it brought forward as an excuse for reckless surgery. We must know better the position of our patient than she does or can know.

In conclusion, I cannot but again here insist upon Dr. Greenhalgh's rule, already several times alluded to—never to operate, in a case of suspected uterine fibroid, until you are certain that the disease is not within the cavity of the uterus. *The sound must have been introduced*. If the instrument cannot be passed in at first, and the os uteri can be reached, proceed as in a case of occluded os. Small punctures, gradually dilated by sponge-tents and extended in the direction of the os, will probably succeed. It is also well, if there is the slightest doubt of coexisting pregnancy, to give ergot before you

operate. It is better to cause a miscarriage than risk the death of a patient. If the os uteri be so high up that it cannot be reached, delay as long as practicable. When obliged, a small exploratory puncture, either *per vaginam* or through the abdominal parietes, is a useful preliminary. It may clear up the difficulties of the case.

With these remarks, gentlemen, I bring these lectures to a conclusion. I trust they have not wearied you; and that, upon the whole, the time thus occupied, has not been unprofitably spent. To me, the preparation for them has been somewhat severe, yet withal very interesting. In the indulgence and kindness with which you have heard me, I am more than repaid for my labour.

## Transactions of Branches.

### LANCASHIRE AND CHESHIRE BRANCH.

#### PRESIDENT'S ADDRESS.

By EDWARD D. DE VITRÉ, M.D., Lancaster.

[Delivered at Lancaster, June 29th, 1864.]

GENTLEMEN,—This appears to be a very fitting opportunity, in looking at the laws of the British Medical Association, to take a retrospective glance at what that Association has done; and I see by our second resolution, that the objects of the Society are: The promotion of medical science, and the maintenance of the honour and interests of the medical profession. Now, if we look at the objects the Society have in view; the means that have been taken to effect them; and the results that have been arrived at; I think that retrospective glance may not be without some advantage to the Association generally.

The first portion of that resolution to which I have referred—the promotion of medical science—is a very fruitful topic indeed, and presents a very large field for observations, of much greater length than I am sure the time and convenience of this meeting will permit me to indulge in. But the mission we have imposed upon ourselves is in itself a noble one—to improve, as members of a liberal profession, that profession to which we have the honour to belong, and it is for the best interests of humanity that we should turn our attention in that direction. The promoters of the British Medical Association very soon found it necessary, for the purpose of advancing the interests of the Association, that they should establish a journal in connection with the Association. That has now been conducted for many years with great ability and talent. It contains a vast amount of scientific intelligence, and many cases of very great importance and of great value to the profession; and, so far, it may be said to have conducted itself in such manner as not only to satisfy the Association itself, but to place the JOURNAL upon a footing with any other magazine in the United Kingdom. Therefore, the means we have used appear to have been extremely legitimate.

It is quite true that a large party of men—I am sorry to say, even of our own professional brethren—are apt to throw a little cold water upon the Association. Some object to it by asking "What has it done?" Some object, from a feeling of dislike, to joining any association of this character. Some may object and cavil—if you please to call it so—for reasons of their own. I would rather deal with these cavillers than with the others; because it appears to

me that they can be more easily met and answered. They seem to forget, they themselves being members of the profession, that medicine is not an exact science. Before medicine could be reduced to such a state as that, I am assured there will be no chance of this Association being given up. Now we ought not, I think (and probably it may be somewhat of a reflection, though not intended as such, upon the Association generally)—we ought not to confine the advantages of this Association solely to ourselves. I dare say many of you have read and are perfectly familiar with a very able paper—an address made by Mr. Jordan, of Birmingham, last year, in which he insists (and I perfectly concur with him) on the great value of educating the public generally in medical science. We well know that the public are the worst possible judges of a medical man's talent or ability. That is proverbial; and it must invariably be so while the public, if they express an opinion at all, are expressing it at second-hand and on a matter in which they are in total and entire ignorance. It is a very remarkable fact that, in every other branch of science that I know of, the public, taking them as a body, are pretty well and generally informed. But, as to the science of medicine, the public positively know nothing. Now we send our children to school; we advance them from school to college; and we launch them upon the world in different professions and pursuits; but we take care to give them the very best education we can procure for them in those schools and colleges at which they may have been, and we fill them with every kind of information that the schools can afford. But what would you think, for instance, of teaching a youth astronomy, instructing him in the laws and the science of the heavenly bodies, and leaving him in entire ignorance of the laws and science of his own body? There is nothing to prevent physiology from becoming a popular science, and the members of this Association, and of the profession at large, from themselves becoming teachers. What would be the effect generally of the public having as good a knowledge of physiology, for instance, as of the other sciences? It would have this double effect. It would no doubt stimulate the medical profession to higher excellence, and it would strike at the root of all quackery and charlatanism. If the public at large are incapable of judging of the medical men's qualifications for his profession, and undoubtedly they must invariably be so as matters are at present, how is it possible that we ourselves can find fault with them for selecting an uneducated medical man, or probably a man who is not a medical man at all, in place of him who is well qualified to perform his professional duties? Can we suppose for a single moment that those aristocratical debauchees who flocked to that arch-quack St. John to have mercury extracted from the napes of their necks—can we suppose that people belonging to the higher ranks of society, if they had any knowledge of medical science, would have gone to him for such a thing? Such could not possibly have been the case, and such would not be the case if the public were educated in physiological science, as I maintain they ought to be. I cannot suppose that we, as an association, are at all disposed to limit in any way the operations of our Association; and I recollect that Mr. Jordan states in his paper that it would in every way be worthy of the profession at large if they would endeavour to infuse a taste for physiological science among the public generally. Once let them obtain it, and, interesting as the laws of medicine are, it would in all probability become as popular a science with them as any other that could be introduced. But there is no taste for it, because there is no temptation. Now if we once set a man's mind inquiring, inquiry begets doubt,



and doubt destroys doubt. That is the great point at which we have to aim in raising the profession to that popular position which it ought to occupy in the country. We ought to raise the people to that standard of education, from which they may judge of the talent and fitness of those medical men with whom they are brought into contact.

I have made these few remarks on the first part of the resolution of the Association, to which I referred. The latter part of that resolution is to "uphold the honour and maintain the interests of the medical profession." Now I have again to appeal to your transactions as set forth in your JOURNAL; and I think that, from the commencement of that JOURNAL up to the present moment, it has strictly vindicated the principles laid down in that resolution. Quackery has been assailed on every side, and heavy blows have been struck, as they ought to have been, when regularly educated men abandoned their legitimate profession, and sought by empiricism to advance their own interests. Such conduct is greatly to the discredit of those men, and no longer entitles them to be considered professional men in any sense of the word. We labour under a very considerable difficulty in our profession—a difficulty such as is not experienced in any other. A member of the bar who should conduct himself dishonourably, or do that which was not in accordance with the laws of his own profession, is disbarred, and no longer permitted to practise. A clergyman, if he have committed faults of a similar character, has his gown stripped from him. An attorney is read out—struck off the rolls—can no longer practise his profession, when he has done that which is dishonourable in itself either to the public or to the profession. But we have no such regulations. We are governed by our own laws, but we have no kind of ethics laid down for our guidance, let alone stating that we have no such legal authority given to us as a body as the other professions have. We can only act upon conventional views to maintain each other in our good work and check any professional man from acting improperly. Further than that, I am afraid, we cannot go. Mr. Jordan has advocated all these matters and proposed extensive reforms. Will any of you gentlemen cast your minds back for the last five and twenty years—there are some of you, probably, who cannot do that; I am sorry to say that I can—cast your minds back for twenty-five years as members of your profession? What a wonderful change has taken place in the science of medicine and in that of surgery. How deeply we are indebted to organic chemistry, and how largely to microscopic inquiry, and what immense fields for inquiry these matters have held out to the profession. The oldest of us are only students yet, and in a profession like this we must ever remain students, for I will tell you this fact, that medical science never will be complete.

I am sorry to have detained you thus long; but it appeared to me that the opening remarks of the President ought to bear in some measure upon the objects of the society, of course having due regard, more than anything else, to the promotion and well-being of the profession at large. I am myself satisfied that a great deal has still to be done, not only to place ourselves in that position at which we so anxiously aim, but also to bring the public up to that standard of education which will enable them to judge of the qualifications of the professional candidates who come before them. We never shall be able to succeed until something of this sort is done. Pains and penalties have no effect; but public opinion is a powerful engine, and in such a matter as this is of infinitely greater value than any pains or penalties that could be inflicted. If the public only knew a little more of physiological science it

would open the door for inquiry, and they would never rest satisfied until they were capable of judging for themselves.

## British Medical Journal.

SATURDAY, AUGUST 6TH, 1864.

### THE ANNUAL MEETING OF THE ASSOCIATION.

THE thirty-second Annual Meeting of the Association commenced, at Cambridge, on Wednesday last. The retiring President, Dr. Symonds, took the chair at 4 P.M., nearly two hundred members being present. After a few earnest valedictory remarks, Dr. Symonds resigned the presidency to his successor, Dr. Paget, who delivered an able address, which is published at page 141.

Dr. Humphry proposed, and Dr. Falconer seconded, that the thanks of the Association be given to the retiring President; and that he be appointed a Vice-President of the Association. The motion was carried by acclamation, and was acknowledged by Dr. Symonds.

The Report of Council was then read by the General Secretary, Mr. Watkin Williams. From it, it appeared that the number of members on the list was above 2,400—a greater number than in any previous year. The Report recommended a perseverance in the efforts made by the Association to obtain for non-resident members of the Royal College of Surgeons the right of voting by proxy, and to improve the condition of the medical officers of the Army and Navy. The adjudicators of the Hastings Prize—Drs. Sharpey, Richardson, and A. T. H. Waters—reported that, of six essays sent in, one on "Urochrome" was most worthy of the prize; and, the sealed envelope containing the author's name having been opened by the President of the Council, it was found that Dr. Thudichum was the successful candidate. The medal was delivered on Thursday morning. On the motion of Mr. Lord, seconded by Mr. Flint, the Report, after some discussion, was adopted.

Dr. Melson and Mr. Hadley were appointed auditors, and Mr. Watkin Williams was re-elected General Secretary, for the ensuing year.

### ACTING ASSISTANT-SURGEONS.

If the three hundred gentlemen who have, in answer to the Director-General's advertisement, offered to accept the degrading conditions therein laid down by him, are not yet awake to the false position in which they have placed themselves, we fancy they will soon become so, and in a very unpleasant way. Unless we are much mistaken, these gentlemen will find

they have not only eaten dirt, but that they have got nothing in return for their performance of that unpleasant operation. Let them reflect, that *as yet*, out of the three hundred, only twelve have been gazetted to office. Why is this? Is it that the Director-General finds them such an indifferent lot, that he can't get out of the three hundred more than four per cent. fit to walk through Coventry with him? or is he merely using their names as a cat's paw? Are we really to understand that three hundred gentlemen have already signed the one-sided offer of services issued by the Director-General (see the JOURNAL of May 28, 1864, p. 590), binding themselves to serve Her Majesty; and that they are now held, like a flock of simpletons, at the beck of that gentleman, who probably will make no further use of them? We ask these three hundred gentlemen to reflect upon their position. Surely the Director-General either wants their services or he doesn't. Will they accept the position of being kept on hand month after month, that he may use them, if he can get nothing better for his money? To us these three hundred gentlemen seem to be placed in a position of unmitigated degradation. They are, in the first place, *as candidates*—merely *as candidates*, let it be noted—made to sign a most unfair, one-sided agreement, undertaking to serve Her Majesty as long as she requires their services, and ready to be kicked out, *per contra*, at a moment's notice; or, to use the words of the Director-General's agreement: "I understand that my employment is of a temporary nature, and that my services may (without any previous notice or compensation\*) be dispensed with at any time," etc.

It is incredible, that three hundred gentlemen should have been found ready to sell themselves into this bondage? But what will they think if they discover at last that they have done all this in vain? What will they say if the Director-General does not appoint them? How long will they consent to hang dangling on the outer hem of the skirts of the Horse Guards? We would, at all events, suggest to them, from the fact that only twelve acting assistant-surgeons (after all these months) have been appointed, something for their serious consideration. One of two things: Either the Director-General does want a large number of army assistants, or he does not. If he does, and does not use up his three hundred, it is

clear that he does not like them, or is afraid to use them. In such case, he keeps this large lot of impracticable materials dangling on hand solely that he may boast of being well supplied with the article. If, on the other hand, he does not really want more than twelve out of the three hundred, then it is very evident that the balance of the three hundred, say two hundred and eighty-eight, are being fed on very barren hopes—*i. e.*, are being humbugged. Either way, we would suggest to these three hundred gentlemen that their prospects are not very flattering. The twelve who get service take it upon terms which a menial servant would reject; viz., prospect of instant dismissal, without a month's warning or a month's wages; and the balance of two hundred and eighty-eight, who are eager to accept these degrading terms of office, are kept in the pleasant position of waiters on the Horse Guards providence; and will in the end, after having stood hat in hand at the door of the Horse Guards for some six to eight months, most probably be told, when they least expect it, that their services are not required, and then ignominiously warned off the premises of the Horse Guards. For their own sakes, we strongly urge these three hundred gentlemen to reflect upon their real position and the contingencies of it. The Director-General may regard them as a forlorn hope called in to defend the breach at the Horse Guards; but they may be well assured, if their hopes turn out forlorn, that the profession will not regard them in the light of the three hundred martyrs who died at Thermopylae.

#### THE NETLEY MEMORIAL.

On the 1st inst., the Prince of Wales laid at Netley the first stone of the memorial to be erected in memory of the medical officers (non-combatant!) of the British army who fell in the Crimean war. The monument is a plain cross, around which will be affixed tablets of the names, etc., of the departed medical officers. The monument has been raised by subscriptions, and costs about £1000.

An address was read to the Prince by Dr. Gibson. During the war, it was stated, that fifty-four officers of the Medical Department who were serving in the campaign, and six physicians and surgeons attached for duty, perished. Their deaths, it was inferred, mainly resulted from the immense pressure of work thrown upon them through the notorious imbecility of the Horse Guards of that day. One cannot help drawing a moral from this tale, and ask, Would not the lives of our medical officers be again sacrificed at the present moment, and in an exactly similar way, if another like war were to break out? Would not the supply of medical officers again fall far below the demand? The best memorial which could be raised to our departed brethren would be some act of sense

\* Of course we must not be hard with the English of the Horse Guards—*i. e.* those who have an instructive as well as competitive examinations; but we should strongly advise any acting assistant who takes service to have an explanation about this word *compensation*. We hardly suppose that it is used here to imply what it actually does; viz., that the acting assistant shall receive no compensation whatever for his services rendered, if so it please the Director-General. What the Director-General probably meant to imply is, that the acting assistant is not to expect compensation of either (say) a month's wages or a month's warning, should he be turned out of his situation at a moment's notice. The Director-General impliedly admits, that any man who is served as these passive acting assistants are, might naturally expect "backshish" in case of summary dismissal; and he therefore tells them before hand that they are only to expect monkey's allowance. EDITOR.



and justice exhibited towards the present medical officers; as an atonement for the sacrifice of such lives in the way spoken of—not in the mere service of their country, but as a necessary consequence of mismanagement at the Horse Guards. “The greater part of these gentlemen,” said Dr. Gibson, “died of disease contracted in the discharge of their duties, or broke down under the enormous pressure of professional work, etc.”

We trust that the erection of this memorial may tend to open the eyes of the public to the injustice inflicted on the medical officer, and, above all and thereby, on the soldier, his patient. The best notice we can take of this occasion is to improve it to the advantage of the future; and with this intent, we ask, again, of those who preside over this department, Is it not, according to your own showing, self-evident that, under you, the medical service has been brought into such a state that, if a Crimean war were to break out to-morrow, the very similar and unnecessary sacrifice of lives which occurred then would occur now? Has experience and the death of these men taught you or brought you to make any fitting provision for the future?

The death of these men, the break down of the Army Medical Service, at that time brought forth the famed Medical Warrant of 1848. But with the pressure of those days, has also perished the Warrant of 1858; and as a fitting appendage, therefore, we would recommend that this fact also be inscribed upon the monument at Netley; viz., that through a trick of the Horse Guards, the life of this Her Majesty's warrant, which was created to appease the manes of our brethren who died in the Crimea, has also been destroyed; and that at this moment, also, the Horse Guards is at its wits' ends to obtain a supply of medical men for the soldier. “Eyes have they and see not”, may be truly said of such Commanding-in-Chief.

#### SYPHILIS IN THE ARMY AND NAVY.

[Communicated.]

THERE is no subject, having reference to the health and efficiency of the army and navy, more important at the present moment than the great amount of syphilis prevalent in these services. The analysis, in the *Annals of Military and Naval Surgery*, lately published, of the latest Annual Health Reports of the Army for 1861, and of the Navy for 1860, shows that, in the army, the disease is scarcely, if at all, diminished; while in the navy, it has been decidedly on the increase. In the army, the admissions into hospital for venereal diseases, including gonorrhoea, still exceed in number one-third of the strength, and the inefficiency caused thereby has been equal to the loss of the services of every soldier at home for over eight days and a half, being a trifle under the amount in the preceding year. In the navy, how-

ever, there was in 1860 a large increase of admissions from venereal, both in the home and foreign stations, over the preceding year 1859; while we find noted a remarkable circumstance; viz., that the attacks of the disease on the Pacific Station are at least twice as numerous as they were twenty and thirty years ago. The primary disease has not been found less virulent or more tractable than formerly; and, in spite of the more judicious treatment of later days, in all venereal diseases, including gonorrhoea, it does not appear that constitutional infection has been less rare. This is especially noticed in the navy, and is not to be accounted for on the supposition that, from change of theory among the medical officers, a different and less successful practice has been adopted. For it is noted that, in cases of hard chancre, and occasionally of other forms of venereal disease, mercury was constantly given. Neither the neglect nor the abuse of mercury, therefore, can be the cause of the great amount of secondary and tertiary disease which is shown to be prevalent in both services.

This is a most important point; for we may rest assured that the Returns do not exhibit the entire amount of constitutional disease caused by the syphilitic infection. This must act most banefully in inducing general cachexia, as also various organic and functional diseases, in such a way, that it cannot always be recognised as the predisposing or exciting cause. For instance, the amount of pulmonary disease, particularly phthisis, is, no doubt, increased by the system having been brought under the influence of the syphilitic poison; and, to some extent, perhaps, by the action of mercury, and the treatment thought requisite for curing the primary disease and eliminating the specific virus from the system. The same may be said, with reference to diseases of the bladder, kidneys, and other organs.

Hence, a question of the greatest importance presses upon our attention: What can the authorities do to lessen the amount of syphilitic infection? To judge from certain isolated attempts in later times, and from previous systems in vogue in the services, it appears that it is quite practicable to keep the disease in check. One of the most encouraging examples for our guidance has been the action taken by the Maltese Government in 1861, at the instance of Deputy Inspector-General of Naval Hospitals Armstrong. The precise nature of the rules enforced is not stated by Dr. Armstrong (*Times*, March 7, 1864), but they must have included strict police supervision, as well as very early and active surgical treatment. They were, however, completely successful; for Dr. Armstrong says that, after the laws had been in operation over two years and a half, “as far as I could learn, the disease had then no existence in the island”, where it had formerly been rife; the only cases known of late among the naval forces being those of importation.

Measures of repression and prevention must differ according to the localities. It is possible that the objections to police supervision and medical inspections, in such places as London, on the score of morality, may be well grounded. But we cannot conceive that there can be any valid objection to the strictest regulations at the seaport towns, which may be said to depend for their existence upon the presence of the navy, or at the chief depôts and garrison towns, which depend upon the presence of the army, as Chatham, Aldershot, etc.

The Navy Health Report informs us, that three-fourths of the disease among the sailors on the home station may be traced to the infected communities of Portsmouth, Devonport, and Sheerness. Surely, in such a case, there need be no squeamishness as to using measures of repression. In addition to strict police and medical supervision of suspicious places and characters, there should be provided the readiest means of cure for the infected: to whom it should not be an object with the authorities to mete out punishment, but to encourage to apply as early as possible for surgical aid, in order that their constitutions may not become permanently deteriorated, and that their services may not be lost to the state for a longer time than may be absolutely necessary for their complete cure. It is said that we must trust to moral influences to wean soldiers and sailors from the vice of promiscuous intercourse, and that it is immoral to try to screen vicious men from the natural consequences of their own misconduct. In accordance with this doctrine carried out to its legitimate consequences, we should refrain from supplying hospital aid to those afflicted with many other diseases incidental to human nature, but traceable too often to the patients' own intemperance, misconduct, or negligence. Let us try all means of reclaiming our soldiers and sailors from vicious habits; but meanwhile do not let us cripple our own resources, and consign the victims of heedlessness and ignorance to premature decay. Let us use all the means in our power, dictatorial and inquisitorial although they will necessarily be, to prevent as well as to cure the plague which now decimates our forces, and brings ruin on the constitutions, not only of those who are infected, but upon countless numbers who are to succeed the present generation. Let police and sanitary regulations in our home depôts and ports be as severe and as strictly carried out as they have been at Malta. Let disease be not only prevented, but carefully searched for, isolated, and cured as speedily as possible, both among men and women. This seems to be a positive duty incumbent upon us, as the guardians of our military and naval defenders. To this extent are we responsible as medical advisers of the community. Let moral suasion be also employed to keep the persons in danger from dangerous and vicious courses; but let not this principle of action

make us shirk the responsibility which lies more especially at our doors.

### GRATUITOUS MEDICINE.

THE following remarks appeared in a number of the *American Medical Times*.

"The medical profession is the only one, we believe, which habitually *donates* the time and services of its members to the public, in their charitable institutions. The services of all others are well paid for, even the chaplains of our hospitals and almshouses receiving fair salaries for the time given and talents exerted. The medical profession, as such, stands alone in liberality to the poor and destitute. The extraordinary amount of its gratuitous services is almost beyond calculation. A few years ago, in a paper read before the Academy of Medicine by Dr. Griscom, the aggregate annual amount contributed by the medical profession of the city of New York to the support of public charities was estimated at one million of dollars. This estimate would now be nearly or quite doubled, as the increase of institutions of medical charity has exceeded the increase of population. We call this a contribution, or tax, for the support of public charity, for the plain reason that, if the members of our profession should at any time unanimously determine to put themselves on the same footing, in this respect, as all others, the inevitable necessity would be thrown upon the public and the Government of *employing* the requisite medical and surgical assistance, at whatever expense. The amount now given by the profession gratuitously would then have to be added to the taxes upon the community; in other words, the expense would be drawn from the pockets of the whole, instead of from the brains and muscle of the few. The reply to such a suggestion would probably be: 'You receive in return the great benefits of the *experience* which so large a field of practice must render highly valuable.' The natural rejoinder to this is: 'The same experience would be had with pecuniary remuneration as *without*.' Moreover, it is the practice of these institutions to receive *others than paupers*. In one institution in New York, more than two-thirds of its beds are occupied by patients capable of paying, and who do pay, good prices. As every such patient, in private, would engage the services of some physician, it follows that, by his going to the hospital, the fees are lost to the profession. But a worse fact than this is still to be mentioned. Between this same institution, as well as others, and the general government, a contract exists, by which the latter may fill its wards with sick seamen to a certain extent, for whose maintenance the government agrees to pay a certain amount for medicine and *medical attendance*; but the medical attendance is rendered gratuitously, to the manifest and direct detriment of professional incomes. The sum paid for sick and wounded soldiers is much above the cost of their maintenance, and the hospital is consequently making money by them. In view of these facts, an ethical question arises in our minds, which is this: Is the medical staff of a hospital justifiable in rendering gratuitous services in such an institution, any more than out of it, to patients able and willing to pay for them? By so doing, the income of the profession is diminished; and the more we yield to the practice, the more it is likely to increase. The saying of Boerhaave, 'The poor are my best patients, for God is their paymaster,' strikes a sympathetic chord in the breast of every honourable physician; but it does not follow that all is charity that passes by the name, even when found in public institutions."



ABOUT seventy graduates of the Edinburgh University met together and inaugurated the existence of an "Edinburgh University Club" by a dinner at the Freemasons' Tavern on the 1st instant; Dr. Markham was chairman. The success of the club has been beyond all expectation. The enthusiasm which was shown by the meeting together of so many leading members of the profession, both of London and the provinces, demonstrated well the respect and love and pleasing recollections with which the University had inspired its members. Dr. Christison would have come up to London expressly to have taken the chair, had he not been detained in Edinburgh by urgent University affairs. The club has the warmest sanction of the Professors of the University; and from the very large numbers of graduates who have joined its ranks, is already a very powerful body. We believe there is scarcely an instance of a club of this kind which has been so suddenly and remarkably successful. Its existence was evidently a thing required.

SUPPOSING the office of Examiner of the Royal College of Surgeons to be worth £400 *per annum*, we might indulge with some show of reason in the following speculation. Ten Examiners at £400 = £4,000 *per annum*;  $£4,000 \times 60 = £240,000$ , which may be speculated on as the sum received from the profession at large by London surgeons during the present century. Mr. Lawrence became an Examiner in 1834; he has, therefore, held office for thirty years. Now,  $£400 \times 30 = £12,000$ —the sum which he may be supposed to have received from the office of Examiner. Mr. Arnott became an Examiner in 1848; he has, therefore, held office sixteen years, and has received, according to this kind of arithmetic, £6,400. Messrs. South and Cæsar Hawkins were elected in 1849; their portion, therefore, might be put at £6,000. We are not, in stating these things, objecting to the size of the examining fees. We only refer to them in order to show that the office of Examiner is really a thing to which men might reasonably ascribe a certain value from a money point of view.

A DISCUSSION touching malignant pustule lately took place in the Academy of Medicine. MM. Gallard and Devers had asserted in their paper, that the disease was developed spontaneously. They argued, for example, that the pustule is not always found on exposed parts of the body; that it sometimes appears on parts which are constantly covered. In such cases, how could it result from inoculation? To this M. Cloquet replied: he had, in his own practice, seen malignant pustule arise on the abdomen of a rabbit-merchant at the very place where his shirt was torn. In a young man, again, with the pustule

on his thigh, he learned that he had pricked himself when bathing. M. Cloquet rejected absolutely the idea of spontaneous origin of malignant pustule. M. Piorry admitted such *sua sponte* origin of the disease. Every day he observed examples of the fact, which were overlooked by others. M. Piorry's idea of the disease, however, turned out to be of wider extent than other people's, including, for instance, gangrenous wounds of the scrotum occurring at the end of fevers. M. Reynal rejected the idea of spontaneous origin; he considered, and gave good reasons to show, that the authors of the paper had been deceived as to the absence of the disease in the department of La Charente previously to the occurrence of their cases. He produced the testimony of a medical man well known in La Beauce, who annually saw between twenty and thirty cases, and could always trace them to their origin. M. Gosselin observed, that in the paper thirty-four cases were related in which the disease could be traced to no ostensible cause.

*L'Union Médicale* thus criticises Mr. Fergusson's lectures. "Instead of giving a complete and methodical exposition of the progress of operative surgery, the lecturer selected arbitrarily some few particular subjects, on which he discoursed without order or method, citing especially the facts observed by himself or his compatriots, and particularly Scotch surgeons. After taking a general view of the last forty years, Mr. Fergusson treated of conservative surgery; on which he dilated, claiming the term as his own, and comprising under it resections, excisions, and ligature of the artery, substituted for amputation in certain cases of aneurism. Then came hare-lip and staphyloraphy, lithotomy and lithotripsy, and all this without the mention of a single Frenchman's name. He then concluded with resection of the knee, to which he devoted his two last lectures. Instead of a picture giving at a glance, and in striking colours, the principal features of this history, we are presented with an imperfect sketch. The work is quite beneath the reputation of the master."

M. Nélaton informs the Academy of Sciences that he has destroyed a naso-pharyngeal polypus by means of an electric current. He made use of Bunsen's pile, with nine plates, and two platina needles of half a *millimètre* in diameter. The first application was continued for ten minutes. The pain was quite bearable. A slight difficulty arose from the white frothy matter, resulting from the decomposition of the parts in which the needles were fixed, falling into the pharynx. There was no hæmorrhage. The patient entered the hospital in January, and was cured by the end of May.

M. Lemaire has demonstrated the presence of the achorion of favus floating in the air, and has thus shown how favus may be transplanted by currents of air to a distance.

## Association Intelligence.

### YORKSHIRE BRANCH: ANNUAL MEETING.

THE annual meeting of the Yorkshire Branch was held in the Philosophical Hall, Leeds, on June 30th; SAMUEL HEY, Esq., President, in the Chair. There were present about thirty members.

A cordial vote of thanks was accorded to the retiring President, J. HAXWORTH, Esq.

*Report of Council.* The SECRETARY read the following Report.

"The Council of the Yorkshire Branch of the British Medical Association have much pleasure in again meeting their fellow-associates in Leeds; and would, in the first place, congratulate them on the absence of any exciting subject in connexion with medical politics, requiring notice in this report, and subsequent discussion in the meeting. Your Council feel glad in being able to place the time, thus saved, at the service of the members who have kindly promised communications.

"Your Council, however, consider they would be neglecting their duty, if they failed to call your attention to the unsatisfactory condition of the Medical Departments of the Army and Navy. They would suggest that some expression of opinion should go from this meeting, which, together with the efforts made by members of the profession elsewhere, may assist in obtaining the removal of the grievances to which the medical officers of the army are subjected, and of which they so justly complain; viz.: 1. The uncertainty as to rank, by the several alterations of the Warrant of 1858; 2. The slowness of promotion, on account of vacancies not being filled up; 3. The difficulty of obtaining leave of absence, or even *sick leave*; 4. The objectionable position of the medical officer, when called upon to superintend the branding of deserters.

"Your Council, feeling assured that the vacancies in the Medical Department of the Army will not be filled up with a right class of men so long as these grievances exist, strongly urge the necessity of aiding every effort to remove them."

MR. NUNNELEY moved, MR. GARLICK seconded, and it was resolved—

"That the Report be received and adopted."

*Branch Council for 1864-5.* The following members were elected to form the Council of the Branch for the ensuing year:—W. E. Swaine, M.D.; G. Shann, M.D.; B. Dodsworth, Esq.; W. D. Husband, Esq.; W. Matterson, Esq.; and H. Keyworth, Esq. (York); J. P. Garlick, Esq.; W. Hey, Esq.; T. Nunneley, Esq.; T. P. Teale, Esq.; S. Smith, Esq.; C. Chadwick, M.D. (Leeds); H. Jackson, Esq.; J. Haxworth, Esq.; J. C. Hall, M.D. (Sheffield); John Ness, Esq. (Helmsley).

*Representatives in the General Council.* W. D. Husband, Esq.; W. Matterson, Esq. (York); T. P. Teale, Esq.; T. Nunneley, Esq.; S. Hey, Esq.; C. G. Wheelhouse, Esq. (Leeds); and H. Jackson, Esq. (Sheffield),—were elected representatives in the General Council of the Association.

*Place of Meeting in 1865.* It was unanimously resolved

"That the next annual meeting be held in York; and that B. Dodsworth, Esq., be the President-elect."

*The Public Medical Services.* It was resolved unanimously, on the motion of MR. NUNNELEY—

"That the Council be requested to prepare and transmit to the proper authorities a memorial em-

bodiment of the various grievances of which the medical officers of the army and navy have so just ground of complaint, and pointing out their injurious effect on the present and future efficiency of the Army and Navy Medical Departments."

*Communications.* The following communications were read.

1. The President communicated an interesting case—probably Congenital Dropsy of the Ethmoidal Cells.

2. Symblepharon. By T. P. Teale, jun., Esq.

3. Practical Remarks on Cases of Tumour obstructing Parturition. By S. Smith, Esq.

*Dinner.* The members and visitors afterwards dined together at the Queen's Hotel.

## Reports of Societies.

### OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 1ST, 1864.

H. OLDHAM, M.D., President, in the Chair.

THREE gentlemen were elected Fellows of the Society.

*Craniotomy Forceps.* DR. HALL DAVIS showed a Craniotomy Forceps, with a fenestrated blade, of the form of a very elongated horse-shoe. It was composed of two parts, male and female; the former was serrated deeply, the serrations pointing backwards, and fitting into the depression in the female part. The lock was like Naegle's, and the handles fastened by a spring and rack at their extremities. This instrument he had tested practically, and found it answered admirably.

*Bandage After Labour.* DR. MEADOWS exhibited a Bandage, which he recommended in place of the jack-towel usually applied after labour. It was made of stout calico, shaped to the abdomen and hips, having one bone for extra support in front. When adjusted, it could be fastened firmly, either by bracket, or laced like a corset. The advantages were facility of application, combined with comfort and greater efficiency.

DRS. ROUTH, OLDHAM, ROGERS, GRAILY HEWITT, and MEADOWS, discussed some points connected with bandaging after labour.

#### ON IMMEDIATE TRANSFUSION.

BY J. H. AVELING, M.D., SHEFFIELD.

The author stated that transfusion had been performed now for two hundred years, and that for the first hundred and sixty years of that time the immediate method had been solely employed. He described the numerous forms of immediate apparatus hitherto used, and pointed out their faults and advantages. He also exhibited an instrument of his own, which consisted of two small silver tubes to enter the recipient and emittent vessels, and of an India-rubber tube to connect them. This had in its centre a small elastic receptacle holding about two drachms, by compressing and relaxing which the blood was made to circulate through the tube, and the quantity passing was measured. He believed that there was less chance of coagulation by the immediate method, and that it had advantages over the mediate mode. The blood was not exposed to the air; the operation was uninterrupted and the closest imitation of nature.

DR. CLEVELAND thought there would be danger of introducing air in the apparatus shown by Dr. Aveling, which was not transparent.

DR. GRAILY HEWITT said that, in the course of last year he had brought the subject of transfusion before the profession, in a paper read at the annual meeting of the British Medical Association held at Bristol;



and he had exhibited at that meeting an apparatus for the performance of transfusion, which he now laid before the Obstetrical Society. The great desideratum in an apparatus for transfusion adapted for use in obstetric emergencies was a simple, certain, and ready means of conveying the blood. The instrument which he had contrived fulfilled, he believed, these indications; and he had had an opportunity of using this instrument only a short time since in the case of a poor woman, dying from loss of blood connected with placenta prævia. The instrument acted admirably, and by its means he was enabled to transfuse two successive portions of blood. The operation was unfortunately delayed, as it proved, a little too long, and the patient failed to derive benefit from the operation; but the experience afforded by the case was such as to justify him in expecting the best possible results from its use in similar emergencies. The apparatus devised by Dr. Aveling, which in principle, he believed, resembled one that had been recommended by Dr. Richardson, was, he considered, objectionable for a variety of reasons. The want of transparency prevented the observer from ascertaining what was going on in the tube; it was not easy to connect, off-hand, the tube with the vein of the individual supplying the blood; and, further, it would be found very objectionable to bring the individual supplying the blood into close proximity with the individual dying from loss of blood. The person supplying the blood was often, in obstetric practice, the husband of the patient; and, unless under very exceptional circumstances, the nerve and fortitude of the individual in question would be likely so to break down as to interfere with the carrying on of the operation. For these reasons, therefore, he believed that, however ingeniously contrived, the "immediate" method could not become a practical operation. The instrument which he (Dr. Graily Hewitt) had employed—constructed for him by Messrs. Whicker and Blaise—was a two-ounce glass cylinder, fitted at one end with a piston and rod, and at the other adapted to the tube entering the vein of the patient. The blood was received into the syringe itself, the piston being removed for this purpose, and the blood was then injected. The peculiarity of the instrument was that the blood was received directly into the syringe, without the necessity for a funnel or other apparatus; and the exposure of the blood to the air and to foreign objects—which hastened coagulation—was thus reduced to a minimum. The operation of transfusion required forethought and arrangement, and accurate appreciation of the difficulties surrounding its performance. These difficulties he had endeavoured to point out and to obviate, in the paper to which he had already alluded.

Dr. EASTLAKE was able to confirm Dr. Graily Hewitt's statement as to the applicability and value of this instrument, having assisted Dr. Hewitt at the operation in question. It would have been impossible in this case to have brought the husband, who supplied the blood, to the bed-side. His nervousness and agitation under such circumstances would probably have prevented the performance of the operation.

Dr. BRAXTON HICKS hoped he should be able some day to bring before the Society a plan which he had employed with success in the lower animals, and also in a case of hæmorrhage in a lady. The principle of its action was to prevent fibrillation, thereby doing away with the greatest difficulty attending the operation.

Dr. AVELING, in reply, would remind the Society that the operation of transfusion had been successfully performed by the simplest means—such as quills; and he differed from Dr. Graily Hewitt in his estimate of the difficulties of the operation.

Dr. GREENHALGH read a paper on Placenta Prævia, the discussion upon which was adjourned till next meeting.

## WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, JUNE 3RD, 1864.

A. W. BARCLAY, M.D., President, in the Chair.

ON THE VARIOUS INSTRUMENTS REQUIRED FOR APPLYING REMEDIES TO, AND OPERATING ON, THE LARYNX. BY MORELL MACKENZIE, M.D.

THE author said that, for applying remedies to the larynx, nothing was so convenient as a camel's-hair pencil, cut square at the end, and firmly attached to the end of a piece of copper wire plated with silver. The copper wire could be bent in any position, and yet remain rigid; and it was convenient to let the wire form one or two coils at its posterior extremity, where it was fixed to a handle of suitable size and shape. This instrument could be bent at any angle; and, in consequence of the coil, could be easily lengthened or shortened. Thus it enabled the operator to introduce solutions into the larynx under almost any circumstances that made such treatment desirable, and in some cases rendered it possible for him to apply topical remedies to the lower part of the wind-pipe.

For the application of solid nitrate of silver, Dr. MACKENZIE recommended a piece of aluminium wire, roughened at its laryngeal extremity, and of course suitably curved. This should be dipped into some nitrate of silver fused over a spirit-lamp. By this means, sufficient of the salt adheres firmly to the extremity of the wire, and can then be safely applied to the interior of the larynx. It was rarely, however, necessary to use the solid nitrate, as the solution was generally found sufficient. Some few laryngoscopists had recommended the application of remedies by means of syringes; but this method generally caused more irritation than when a brush was used. The late Dr. Theophilus Thompson had used a curved silver tube, terminating at one end in a finely perforated extremity, whilst at the other there was a small caoutchouc bag, by means of which the fluid was forced into the larynx. This instrument had lately been revived; but as, in its use, the palm of the hand or the thumb has to be pressed against the elastic bag, the position of the instrument is thereby altered, and medicated solutions cannot be applied with much certainty. Rauchfuss had lately recommended a somewhat similar instrument; but his is made of vulcanite instead, and is, therefore, much cheaper. Rauchfuss's instrument could be employed either for powdered substances or for solutions. The author remarked that, by having the caoutchouc bag at the upper part of the tube, the pressure could be applied from above downwards with the index finger, and thereby the position of the point of the instrument was not altered.

The author next briefly described his laryngeal galvaniser, which, he said, was now used by almost all laryngoscopists, both in this country and on the continent. In support of its value, he referred to his pamphlet on the subject. He next showed his scarifier. This instrument the author described as very useful in œdema of the larynx, whether of an acute or chronic character; also in some cases of thickening of the mucous membrane; and sometimes for operating on excrescences, opening abscesses, etc.

The author next exhibited his pharyngeal forceps for removing growths from the larynx. He observed, that all the instruments which he had introduced

acted on the same principle, or rather required the same method of manipulation. They were all to be held firmly between the thumb and second finger; so that the index finger is left free, to press down a spring on the upper part of the instrument. In this way, the position of the point of the instrument was scarcely altered at all; and where one was, in fact, aiming at an image, that was of the greatest importance. In Dr. Mackenzie's forceps, the closure of the blades is effected by means of a hollow which is made to inclose them, so that the blades themselves do not move. The merit of the instrument consisted in the great number of indications it fulfilled; in fact, it was adapted for operating in any case, in any larynx, in any part, from considerably below the vocal cords to the lingual surface of the epiglottis. 1. The blades of the instrument turned round, and could be directed to either side of the larynx, or anteriorly and posteriorly. 2. The instrument was provided with tubes curved at different angles—an arrangement adapted for overcoming the difficulty arising from the varying inclination of the laryngeal opening in the pharynx. 3. The instrument could be made shorter or longer, according to the circumstances of the cases. 4. Different kinds of blades could be used; the teeth could be either at the side or the extremity; and the blades could be either long or short.

The tube which passed over the forceps was made in two pieces, united by bayonet joints. By this means the instrument could easily be kept clean—a matter of great importance, as regards the safety of an instrument employed in the larynx. The author observed, that with this instrument he had operated on more than a dozen cases. In nine, the growths had been completely removed; and in most of them, aphonia of many years' standing had been relieved. The author said that the great ingenuity of this instrument was due to the mechanical skill of Mr. Krohne of the Whitechapel Road, who made the forceps, as well as the other instruments.

In conclusion, the author exhibited several patients suffering from rare morbid conditions. One was a case of aphonia, of eleven years' standing. In this case, the anterior two-thirds of the vocal cords were completely atrophied, so that only the posterior intercartilaginous portions approximated. Another was a case of aphonia which had existed for fourteen years; it was caused by adhesions of the inner surfaces of the true vocal cords. The two cords were adherent for about a quarter of an inch from their anterior insertion; their posterior three-fourths scarcely moved at all. In a third case, in which there was a shrill voice and stridulous breathing, the symptoms depended on spasm of the left vocal cord, probably arising from pressure on the recurrent nerve. The cause of the pressure was not determined.

**DEATH FROM HYDROPHOBIA.** A case of death from hydrophobia took place on the 28th ult., at Stockport. Early in June, the deceased, a boy aged 16, was attacked by a strange large dog. Three persons were bitten—the boy, his father, and a younger brother; the father in his arm; the youngest boy, Jacob, on his thumb, drawing blood; and the deceased, Job, on his thumb—slightly, a mere scratch. The father and youngest boy had their wounds attended to by a surgeon; but it does not seem that the scratch on the hand of the elder boy was thought to require such treatment. On July 26th, the boy was taken ill with symptoms of hydrophobia, which rapidly developed. The attack lasted three days from its commencement.

## Medical News.

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.** The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 26th.

Blair, Charles Edward, Wandsworth  
Brewer, Alexander, Hampton, Victoria, Monmouthshire  
Collier, Thomas, Bridgend, Glamorganshire  
Covey, George, Eastgate  
Craig, John, Hamilton, Lombury Square  
Daglish, Richard, R. the City, Wigan  
Davies, Thomas, Henry Whitehouse, Stroud  
Develly, Henry James, Wandsworth  
Duke, John, Chalfont, Leicestershire  
Fisher, John, Moore, Hull  
Gill, George, Liverpool  
Gornall, John, Hankinson, Liverpool  
Hedley, John, Newcastle  
Hills, George, Henry, Old Kent Road  
Lafren, Thomas, Dublin  
May, Augustus, Plymouth  
More, James, Rothwell, Northamptonshire  
Morris, Thomas, Henry, Spalding  
Reed, Walter, Hugo, Tiverton, Devon  
Renton, William, Matthew, Stoney Bridge  
Roberts, John, Clayton, Pockham  
Savage, George, Henry, Brighton  
Turner, Frederick, Buxton  
Vase, William, Foster, Spalding  
Wrath, John, Hargrave, L.S.A., Over Darwen

Admitted on July 27th—

Bailey, William, L.S.A., Tipton, Staffordshire  
Barnes, Henry, Wigton, Cumberland  
Collingwood, Joseph, Edward, Corley, Lincolnshire  
Fairbank, Thomas, Islington  
Fyson, Ernest, Last, Exning, near Newmarket  
Goddard, Richard, Carter, Stockport  
Harding, William, Henry, Wormley, Herts  
Lawrence, Henry, Cripps, Surbiton  
Martin, Paulin, L.S.A., Abingdon  
Morgan, Lewis, Wayne, Hales, Glamorganshire  
Nivison, Thomas, Renny Strachan, Edinburgh  
Renton, David, M.D. Edin., Madeira  
Richardson, James, Francis, Hamilton, Down, Kent  
Roberts, Thomas, Edward, Gibraltar  
Rogers, Charles, Edward, Heron, Westmeon, Hants  
Shearwood, Joseph, Hiron, Spilsby  
Turner, Ebenezer, Fulham, Upper Clapton  
Wilmot, Alfred, Edward, Ryde  
Wilson, Stephenson, Moreton, Wightman, Mowsley, Leicestershire  
Wood, William, Thomas, Hurd, Nottingham  
Wright, Charles, James, Wakefield

**APOTHECARIES' HALL.** On July 28th, the following Licentiates were admitted:—

Best, Frederick, Arthur, Cambridge Street, Hyde Park  
Brown, George, Arthur, Welchpool, Montgomeryshire  
Byles, James, Cotton, Victoria Park Road, Hackney  
Evans, Alfred, Paget, West Bromwich  
Haigh, Thomas, Hinchliffe, Golcar, near Huddersfield  
Jones, John, Foulkes, Dolgelly, North Wales  
Lavin, Michael, Drury, Bushy, Herts  
Lawrence, Frederick, George, Malmesbury, Wilts  
Lawrence, George, Richard, Wantage, Berks  
Martin, James, Hamilton, Tregoney, Cornwall  
Morris, Griffith, Davies, Dyffryn, North Wales  
Quick, John, Roy, Old Kent Road  
Taylor, James, Chapel-en-le-Frith, Derbyshire  
Turner, John, Sidney, Guy's Hospital  
Watts, William, Frederick, Dewsbury, Yorkshire  
Wearing, Allen, Lancaster

At the same Court, the following passed the first examination:—

Berry, Other, Windsor, Charing Cross Hospital  
Clothier, Henry, University College Hospital  
Flint, Frederick, King's College Hospital  
Haydon, Nathaniel, Thomas, John, St. Mary's Hospital  
Hembrough, John, William, St. Bartholomew's Hospital  
Hughes, John, Pearson, University College Hospital  
Marsh, William, Joseph, Guy's Hospital  
Taylor, Theodore, Thomas, St. Mary's Hospital

## APPOINTMENTS.

### ARMY.

JOHNSTON, Surgeon J. W., M.D., 85th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.  
MADE, Assistant-Surgeon R. W., 85th Foot, to be Staff-Assistant-Surgeon, vice H. P. Gregory.



## ROYAL NAVY.

GRANT, William Esq., Acting Assistant-Surgeon, to the *Warrior*.  
HURLEY, Francis N., Esq., Assistant-Surgeon, to the *Meander*.

## VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

ALLAN, P. M., Esq., to be Assistant-Surgeon 1st Forfarshire R.V.  
DOWNES, P., M.D., to be Hon. Assistant-Surg. 28th Cheshire R.V.  
KENNEDY, J. B., Esq., to be Assistant-Surgeon 3rd Essex A.V.  
MORRIS, S., Esq., to be Hon. Assistant-Surg. 48th Lancashire R.V.

## BIRTH.

RICHARDSON. On August 1st, at 12, Hinde Street, the wife of  
\*Benjamin W. Richardson, M.D., of a daughter.

## DEATHS.

\*BELL, W., M.D., at 33, George Street, Hanover Square, on July 23.  
DON, James, M.D., Retired Surgeon-General, Bombay Army, at  
Bearehill, Brechin, on July 18.  
FURBER, George, Esq., Surgeon, at Torriano Avenue, Kentish Town,  
aged 70, on July 25.  
GIBBS. On July 21st, at Westbury, Wilts, aged 48, Amelia Jane,  
wife of J. H. Gibbs, M.D.  
RAY. On July 25th, at Lowestoft, Kate, wife of James Ray, Esq.,  
Surgeon.  
WILDBORE, Daniel H. G., M.D., at 2, Charlotte Street, Fitzroy Square,  
on July 27.  
WILKIN, Henry, Esq., late of 39, Connaught Terrace, aged 62, on  
July 26.

THE BRITISH ASSOCIATION. The next meeting or  
the British Association for the Advancement of Science  
will be held at Bath, on September 14th; Sir  
Charles Lyell being President.

PUNISHMENT FOR STRIKING AN ASSISTANT-SURGEON. At Jullundar, in India, a private in the 19th  
Regiment has been sentenced to penal servitude for  
life for striking an assistant-surgeon.

PUTRID MEAT. In the House of Commons, lately,  
Mr. Crawford said it appeared from the report of the  
Sanitary Committee of the city of London that in  
the twelve months ending September 1863, not less  
than 114,000lbs. of diseased, and 76,000lbs. of putrid  
meat, were seized and condemned in the city of London.

QUEEN'S COLLEGE, BELFAST. The report of the  
President shows that the institution is increasingly  
prosperous. Since 1852, the number of students has  
risen from 154 to 388. The Medical School of the  
Belfast College is highly prosperous, the number of  
students having increased, since 1850, from 55 to 143.  
Dr. Henry ascribes the success of the College, and  
the honour which the students confer upon it, to the  
great ability, zeal, and unity, of the distinguished  
corps of professors.

DEATH FROM UNSKILFUL INOCULATION. On the  
calendar, at the late assizes at Donegal, were five  
cases of homicide, in four of which young children  
lost their lives from being inoculated by unprofessional  
and unskilful persons. It would seem that  
this mischievous practice is prevalent in that county.  
It was a matter of amazement, Judge Monaghan  
said, that the peasantry allowed themselves to be  
duped by ignorant impostors, seeing the care the  
legislature had taken to place at their very doors the  
gratuitous services of skilled practitioners.

DEATH FROM MORPHIA. An inquest was held on  
the 29th ult., at Hoxton, on Richard Tuckwell. The  
deceased gentleman was visiting London, for the purpose  
of passing his examination at Apothecaries' Hall. He  
had been studying hard lately, and complained of  
being unable to sleep at night. On Monday night,  
he took a dose of morphia in order to sleep, and  
retired to bed at half-past nine o'clock. He was heard  
breathing heavily, and could not be aroused. Remedies  
were applied without effect, and he died in five hours.

THE RESPONSIBILITY OF MEDICAL MEN. At  
Shrewsbury, last week, a plate-layer of Stourbridge  
brought an action against a medical man, to recover  
damages for negligence in the treatment of the dis-  
located shoulder of the plaintiff. In March, the  
plaintiff dislocated his shoulder, and was attended by  
the defendant; but whether the latter set the joint  
or not was the point in dispute. In the middle of  
April, the plaintiff began to experience serious symp-  
toms in his shoulder, and was at length compelled to  
go to the Birmingham Hospital, where he was put  
under the influence of chloroform, and his shoulder  
set; but he would never be able to work with the arm  
again. The jury found a verdict for the plaintiff;  
damages, £50.

THE DISEASES OF CATTLE. The Select Committee  
to whom the Cattle Diseases Prevention Bill and the  
Cattle, etc., Importation Bill were referred, con-  
sidered the Bills, and took evidence thereon; and  
went through the Cattle Diseases Prevention  
Bill, and made amendments thereunto; and with  
respect to the Cattle, etc., Importation Bill came  
to the resolution that it is inexpedient to proceed  
with the same. The committee recommended that  
when foreign cattle are imported affected with pleu-  
ropneumonia, scab, or foot-and-mouth disease, only  
the animals actually at the time affected with these  
diseases should be detained or slaughtered, and that  
the remainder of the cargo should be allowed to pass  
without being detained.

LUNATICS IN GAOLS. Judge Monaghan stated, at  
the recent Donegal assizes, that there were in the  
prison of the county forty lunatics, all in charge of  
an ordinary turnkey, assisted by persons who are  
undergoing their sentences of imprisonment with  
hard labour. The prisoners were thus transferred into  
keepers or warders. Nothing worse than this state  
of things could be conceived. It virtually set aside  
the sentence of hard labour; it prevented the cura-  
tive treatment of the lunatics; and it was subversive  
of prison discipline. If a gaol were to be converted  
into a lunatic asylum, care should be taken that the  
lunatics should not be left in charge of an inefficient  
staff of officials. There is, however, a lunatic asylum  
for the district in course of erection, and some months  
hence the poor lunatics of Donegal will have a chance  
of proper treatment.

BAD MEAT IN LONDON. The officers have con-  
demned 60,823 lbs., or rather more than 27 tons of  
meat, as unfit for human food, during the last quar-  
ter. The chief increase was in the quantity of putrid  
meat, and of meat from animals that had died from  
accident or disease; for the former rose from an  
average of 6,503 lbs. in the quarter, to 28,186 lbs., and  
the latter from 4,887 lbs. to 11,058 lbs. Nearly half  
of the putrid meat was condemned in the third week  
of May, when the temperature suddenly rose to  
above 77° Fahrenheit. Amongst the items which  
contributed to this amount were 60 prairie-birds.  
Prairie-birds are largely imported from America;  
and although they come here in apparently good con-  
dition, yet there is at times something about them,  
either in the nature of the food which they have  
eaten or in the manner of their preservation, which  
makes them unwholesome. Again and again, it was  
reported that persons who had eaten the birds had  
been made ill by them, and had been affected with  
sickness and diarrhoea. Dr. Letheby, however, failed  
to discover anything of a poisonous nature in the  
food or flesh of the birds; and was, therefore, dis-  
posed to think that, like German sausages, they are  
occasionally subject to some peculiar kind of putre-  
factive change from the manner in which they have  
been kept.

**DUBLIN DRAINAGE.** The Registrar-General for Ireland, in his weekly report for Dublin, ending July 16th, says: "The Registrar of No. 3 North District, City, states 'that no house drains exist in Greek Street, although a main sewer runs through it!' He adds that 'Bull Lane is a filthy alley, ill-ventilated and overcrowded;' and that 'cases of small-pox, fever, and scarlatina have occurred in the house, 39 Bow Street, since January 1st, 1864.'"

**TESTIMONIAL TO MR. W. J. CLEMENTS.** On the 19th ult., a magnificent testimonial was presented to Mr. W. J. Clements of Shrewsbury, amidst the applause of hundreds of his fellow-townsmen. The testimonial consisted of a magnificent silver table ornament, weighing 1,000 ounces. On it was inscribed as follows: "This testimonial is presented to W. J. Clements, F.R.C.S., by the members of the Council of the Borough of Shrewsbury, and by a large number of his professional brethren and other friends, as an acknowledgment of the munificent and graceful manner in which he discharged, during the past year, the duties of Mayor and Chief Magistrate of Shrewsbury; as a memorial of sincere respect for his distinguished professional talents; and as a tribute of esteem for his earnest zeal, ability, and generous aid in promoting works of usefulness and charity. July 19, 1864." This was accompanied with a handsome book, containing the names of the subscribers. Acts of this kind are happy testimonials of respect shown to the whole profession; and the profession cannot but feel deeply indebted to those of its members who, like Mr. Clements, have so lived and acted as to excite and gather the applause of those amidst whom they live.

**UNIVERSITY COLLEGE, LONDON.** On the 29th ult., the distribution of medals and certificates of honour to the students of the Faculty of Medicine for the summer term, took place; Professor Sharpey, M.D., F.R.S., presiding. Medals and certificates of honour were awarded as follows. *Pathological Anatomy.* Gold medal, Philip Brookes Mason, of Burton-on-Trent; 2, George W. Rigden, of Canterbury. *Medical Jurisprudence.* Gold medal, Philip Brookes; *Certificates*—2, George Jackson, of Beeralston, Tavistock; 3, Geo. W. Rigden. *Practical Chemistry.* Gold medal, Thos. B. Hay, of London; *Certificates*—Ethelred Dessé, of the West Indies; 3, Wm. R. Gowers, of Coggeshall, Essex; 4, Nicholas Marshall, of St. Austell; 5 (equal), T. R. Loy, of Stokesley, Yorkshire, and Thomas Hopgood, of Chipping Norton; 6, Robert C. Joy, of London. *Midwifery.* Gold medal, William Spooner, of Southampton; *First silver medal*, Bryan H. Allen, of London; *Second silver medal*, William Hoffmeister, of West Cowes; *Certificates*—4, George Crowe, of London; 5, William A. Stuart, of Barbadoes; 6, Joseph Thompson, of London; 7, Francis J. Grose, of Dinapore, Bengal; 8, J. N. S. Shrapnell, of Isle of Wight; 9, John D. Wathen, of Fishguard; 10, Wm. C. Cass, of Cowes; 11, Richard D. Logg, of Agra. *Botany.* Gold medal, W. R. Gowers; *Silver medal*, Ughtred J. Kay Shuttleworth, of London; *Certificates*—3 (equal), J. Wreford Langmore, of London, and Henry Cass, of Isle of Wight; 4, William B. A. Scott, of London.

**POISONED FLESH PROHIBITION, ETC., BILL.** On the motion in the House of Lords for the second reading of this Bill, Lord Wodehouse observed that it was necessary in the country to use poison for the destruction of rats, but if the Bill passed no poison could be laid for rats outside a dwelling house, not even in a garden. The Duke of Buccleuch remarked that the custom of throwing strychnine about for vermin led to the destruction of shepherd's dogs, which ate the poisoned vermin. The Marquis of Clan-

ricarde observed that pheasants were poisoned by eating worms generated in the bodies of poisoned animals. It was a curious but well known fact in natural history that though those worms did not die from the effects of the poison, they communicated it to birds. Lord Wodehouse was certainly not in favour of laying poison for small birds, which, so far from being noxious, were extremely useful. Lord Portman supported the Bill. The practice was for keepers to poison rabbits with strychnine and then use the rabbits to poison other things. But if one of these rabbits was found by any passers-by and eaten the result would be deplorable. The Bill was read a second time.

**CRIMINAL LUNATICS.** At Michaelmas, 1863, there were 929 criminal lunatics or insane persons under detention in asylums and licensed houses in England and Wales, 717 males and 212 females. Their offences have been various—from murder down to that of being a wandering lunatic. The number in custody in the course of the year is stated at 817 males and 331 females, but it is probable that nearly 100 of the latter are counted twice over—namely, in Broadmoor Hospital, to which they were removed, and also in the asylums from which they were brought. Only a small proportion of these prisoners were acquitted on the ground of insanity; the majority became insane after trial, and many were committed being found insane. Nearly half have been more than four years in custody, several more than twenty years. In the course of the year 137 men and 40 women were added to the number; on the other hand, 53 died, six escaped, and 45 (32 men and 13 women) having become sane, were either discharged or removed for trial or punishment. It is stated that in 37 county asylums the average cost per head for the year was £23:5s.; that at Bethlehem Hospital the charge payable from the public funds gave an average of £46:14s:2d., and at Fisherton £30:14s:1d.; and that in some of the licensed houses individual cases will be found where the costs, defrayed from private funds, amount to £150, £200, £400, £480, and even £530.

**A CAUTION TO SURGEONS WANTING ASSISTANTS.** On Friday, July 8th, before Mr. Justice Erle and a special jury in the Court of Common Pleas, Thomas Nicholas Gray, who described himself as "late of the Federal army" and of Dublin, sued Mr. E. J. Morris of Adelaide Terrace, Barking Road, for £52 or a year's salary at £1 per week. The plaintiff swore that he had applied for a situation through Mr. Langley of Lincoln's Inn Fields, and had been been put into communication with Mr. Morris on April 4th; that Mr. Morris had said that he would engage him, but would write to his references, who, the plaintiff admitted, were not professional men. After a lapse of three weeks the defendant sent him a letter stating that he would not require the plaintiff's services. He further alleged that his references had been written to; and that, as he was satisfied their replies were satisfactory, he claimed a year's salary for non-fulfilment of contract. The defendant being sworn, declared that Gray did not come to him until April 28th, and that he had written to a medical man of standing who had been mentioned by Gray as a reference, but who had advised him to have nothing to do with the plaintiff. He declined to engage Gray because this reference was unsatisfactory. Mr. Langley corroborated Mr. Morris as to the date of the application. He proved also that a month's salary only could be claimed according to custom; and further that, if an engagement had been concluded, there would have been a fee due to him (Langley) which had never been tendered or paid, and which he had never considered to be due, and had never applied for



or entered on his books. The Judge pointed out that, if such an action as this could be sustained, no employer of any kind—even a lady engaging a maid—would be safe. The jury after a brief consultation, returned a verdict for the defendant. The defence of the action has cost Mr. Morris a considerable sum of money; and there is no probability of his recovering the costs.

**MIDDLESEX HOSPITAL MEDICAL SCHOOL.** The distribution of prizes took place on July 25th, Lord Radstock in the chair. The following prizes and certificates of honour were awarded. *First Year's Students:—Summer Session, 1863. First Prize, Mr. Charles Wills; Second Prize, Mr. Vincent E. Noel. Certificates of Honour. Materia Medica. Mr. C. Wills; Mr. John Swindale; Mr. V. E. Noel; Mr. Alfred Jones. Botany. Mr. C. Wills; Mr. V. E. Noel. Prize for Herbarium. Mr. James Worthington. Practical Chemistry. Mr. V. E. Noel; Mr. C. Wills; Mr. J. Swindale; Mr. James F. Cadle. Winter Session, 1863-64. First Prize, Mr. John C. Bailey; Second Prize, Mr. John H. Casson. Certificates of Honour. Anatomy. Mr. John R. James; Mr. J. C. Bailey; Mr. J. H. Casson; Mr. Horace Chaldecott; Mr. William Draper. Physiology. Mr. J. C. Bailey; Mr. J. H. Casson; Mr. William W. Smith; Mr. W. Draper. Chemistry. Mr. J. R. James; Mr. J. H. Casson; Mr. J. C. Bailey; Mr. H. Chaldecott; Mr. W. Draper. Second Year's Students:—Summer Session, 1863. First Prize, Mr. Henry W. Freeman; Second Prize (equal) Mr. George Clements; Mr. Robert King. Certificates of Honour. Midwifery. Mr. H. W. Freeman; Mr. G. Clements; Mr. R. King; Mr. Horace Basan. Medical Jurisprudence. Mr. G. Clements; Mr. R. King; Mr. H. W. Freeman; Mr. H. Basan. Winter Session, 1863-64. First Prize, Mr. C. Wills; Second Prize, Mr. J. Swindale; Third Prize, Mr. V. E. Noel. Certificates of Honour. Medicine. Mr. C. Wills; Mr. E. Noel; Mr. J. Swindale. Surgery. Mr. J. Swindale; Mr. C. Wills; Mr. V. E. Noel; Mr. Henry S. Shaw. Anatomy. Mr. C. Wills; Mr. V. E. Noel; Mr. J. Swindale; Mr. Richard M. Williams. Physiology. Mr. C. Wills; Mr. V. E. Noel; Mr. J. Swindale; Mr. R. M. Williams. Pathology. Mr. J. Swindale; Mr. V. E. Noel; Mr. C. Wills. Prize offered by the Medical Society for the best Paper of the Session. Mr. H. W. Freeman. Third Year's Students:—Clayton Prize for Comparative Anatomy (equal) Mr. Charles Wightwick Pitt; Mr. V. E. Noel. Clinical Medicine. First Prize, Mr. George Clements; Second Prize, Mr. Edward Norton. Clinical Surgery. First Prize, Mr. G. Clements; Second Prize, Mr. E. Norton. Governor's Prize for the best Reports in Clinical Medicine and Surgery and for General Excellence. Mr. H. W. Freeman. Honorary Certificates of General Good Conduct and Diligence. Messrs. H. Basan; Alfred Bick; Henry P. Chandler; G. Clements; Henry Cribb; John S. Dickenson; H. W. Freeman; R. King; Anthony J. Newman; E. Norton; John Ring; Charles E. H. Rogers; Ebenezer Snell; William F. Vise; Albert Waymouth; and William J. Wey.*

**CURIOUS LEAD-POISONING.** Mr. Tuson, of the Royal Veterinary College, writes that in May three cows died at Rugby, with obscure symptoms. On making a *post mortem* examination, fragments of lead were found in their alimentary canals, especially in the paunches. It was then remembered that the cows had been kept in fields immediately adjoining the butts of the rifle volunteers. Among the herbage were discovered fragments of lead which corresponded very closely with those found in the stomachs of the cows. The lead here referred to is called "bullet spray." Some of this spray had been evidently picked up by the cows, and doubtless, poisoned the animals.

Since the death of the three cows, the owner has lost two more under precisely the same circumstances. The viscera of one of the cows which died last were sent to Mr. Tuson for analysis, and he was enabled to demonstrate the presence of lead, not only in the coats of the stomach and intestines, and in their contents, but likewise in the liver and kidney. [From another source, we learn that the symptoms for above a fortnight before death, as described by the owner of the cows, were entire loss of appetite, great thirst, violent purging, increased respiration, grunting as though in considerable pain, indisposition to move, etc. The cows had not been in the field where the lead was, since November; hence it is supposed to have lain in their stomachs for several months.]

**A PROTEST.** The following has appeared in the daily journals. "We have been much surprised at the assertion made by Dr. Hanks at an inquest held by Mr. Humphreys at the Three Cups Tavern, Bow, on July 21st, 'that it was a common practice for medical men to let the bodies of still-born children be buried in back gardens.' Knowing such a statement to be contrary to the fact, and likely to lead to serious consequences if not contradicted, as medical men of the East-end of London we beg to enter our indignant protest against such a charge, medical men having long known that a certificate was necessary in all cases of still-born children. Dr. Hanks's statement that 'the medical profession wished particularly to know whether still-born children required certificates,' and 'that after the verdict they would know what to do,' was quite uncalled for. E. M. Davey; G. Rogerson; Raphael Meldola; J. G. Mas-singham; Fredk. J. Reilly; B. T. Shaw; Samuel Thompson; L. Llewellyn; C. Rose; Ben. B. Lyel; Geo. Davies; W. Nix; W. R. Goodfellow; Chas. Hawker; E. Moore; J. B. Hamilton; A. Atkins; A. Nelham."

**WAR.** A special correspondent of the *American Medical Times* writes as follows from Fredericksburg, on the state of the wounded of Grant's army: "The disposition of the wounded throughout the city is the most available that can be made under the circumstances. Old stores, warehouses, printing-offices, etc., without ventilation, and filthy and musty in the extreme, were occupied. As there were no bedsteads or bedsacks, the patients were laid on the uncleaned floors on their wet and soiled blankets. Being impressed with the importance of keeping their wounds constantly wet, each wounded man carried his canteen well filled with water, and every few minutes deluged his limb. The effect was to render their clothing wet, and oftentimes to flood the floor with water. It was very evident that the gathering of so many patients upon the floors of old, deserted, filthy, and confined buildings, having wounds that must lead to enormous suppuration, would result in a fearful mortality. Nor has that anticipation been unfulfilled. Pyæmia, erysipelas, etc., promptly occurred, with all their destructive results. Tetanus also appeared, and has prevailed to an alarming extent. Much as the sympathy of the people may be excited by the long exposure of the wounded upon the field before they are placed in hospitals, there is no doubt in my mind that in this pleasant weather such exposure to the elements is infinitely less dangerous than exposure to the poisonous atmosphere of old deserted buildings. It was a frequent remark that the wounds of those who had lain two or three days on the field were in a perfectly healthy condition. The wounds were of every conceivable kind. The severest wounds were received in the head, neck, and upper part of the chest, which, for the most part, took an oblique direction from before, downwards, and backwards.

This direction of the track of the ball was due to the fact that much of the fighting was done by both armies while lying upon their faces. In some instances, the ball penetrated the supraclavicular region, and lodged deeply among the viscera. There was, also, the usual number of compound fractures of the lower extremities, in which the limbs had not been amputated. But, under the circumstances of their admission to the Fredericksburg hospitals, they admitted of only palliative treatment. The period for primary amputation was past, and the period for secondary amputation had not arrived. Permanent dressings for union of the fractures were wanting; and, besides, these hospitals were only temporary stopping-places, and a long and tedious transportation awaited them. We could only place these patients upon 'bunks', adjust the limb, attach a suitable weight to the foot, and place sand-bags upon the sides of the fractured portion to retain it upon its posterior surface."

## Varieties.

**WOUND OF THE HEART.** Dr. L. G. Hicks of Simpsonville, Kentucky, mentions in a business note, a remarkable case of wound of the heart which came under his observation. He says: "A man shot through the left ventricle of the heart was moved four miles and lived forty-eight hours, and was perfectly rational." The nature of the wound was revealed by a post mortem examination. (*Med. and Sur. Reporter.*)

**SMALLEST BRAIN ON RECORD.** In the transactions of the Anthropological Society, Dr. Gore furnishes an account of a female aged forty-two years, whose brain without the membranes weighed two ounces and five grains, it being the smallest mature human brain on record. She was five feet high and her intellect was infantile. The brain of the adult male averages forty-nine ounces; in females it averages forty-three and a half ounces; giving forty-six ounces as the general average of the human brain.

**DIABETES IN A MONKEY.** M. Berenger-Feraud brought two monkeys from Algiers; and, in the hope of saving them from pulmonary consumption, tried to persuade them to live on a mixed diet of animal and vegetable food. One positively declined, and soon died of acute tuberculosis. The other adopted the mixed diet, and stood the cold well for a time; but unmistakable symptoms of diabetes manifested themselves, and this monkey also died after a residence of nine months in France.

**PLASTICITY OF BLOOD-CORPUSCLES.** In the proceedings of the Royal Society, Dr. Sharpey remarks: "The plasticity of the blood-corpuscle is unrivalled by any other physical body. It will assume all sorts of protean shapes under the slightest influences, elongating to a mere thread; it will pass through a narrow chink; it will enwrap itself round an acute projecting angle, or protrude feelers and tails under the influence of currents. In its natural state, it possesses sufficient elasticity to resume its original shape on the cessation of the modifying influences; but when gum or gelatine has been added, or when the plasma has been permitted to thicken spontaneously, the corpuscle retains any form it may have assumed, till again altered by fresh influences."

**POISON-BOTTLES.** Poison-bottles and poison-corks, poison-caps and poison-stoppers, have all successively been tried, with the object of preventing careless or sleepy nurses from giving medicines out of the wrong bottles and thereby poisoning their patients; but

they are all open to the objection that when the liquid for which they have been originally used is exhausted, the very nice-looking bottle is generally replenished with eau de-Cologne, tincture of senna, or such like innocent compounds, and the object of having a peculiarly contrived bottle is thereby defeated. Perhaps the most unobjectionable of all these attempts to substitute a mechanical contrivance for ordinary caution and common sense, has been brought forward by Mr. Thonger before the Pharmaceutical Society. It consists of a patent label having a border of sand-paper round it, thus appealing strongly to the sense of touch, which is presumed will warn the holder that danger is near. These labels are applicable to dispensing bottles and to the smallest phials, and possess an advantage over any other contrivance, as they can be stuck on any vessel, and as readily removed when the poisonous contents are done with, and the bottle is required for something else. (*Quarterly Journal of Science.*)

## OPERATION DAYS AT THE HOSPITALS.

|              |  |
|--------------|--|
| MONDAY.....  | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| TUESDAY....  | Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| WEDNESDAY... | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.   |
| THURSDAY.... | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.   |
| FRIDAY.....  | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY.... | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

## TO CORRESPONDENTS.

\*• All letters and communications for the JOURNAL to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE crowded state of our columns prevents the insertion of many of our correspondents' communications this week.

M.D. has no right to complain that his anonymous note has not been noticed.

THERAPEUTICAL INQUIRY. No. IV. SCARLATINA.—SIR: I am sorry to say that only the following gentlemen have sent me Schedules.

|  | No. of cases. |
|--|---------------|
| T. J. Dyke, Esq. (Merthyr Tydfil) .....        | 24            |
| Charles Steele, Esq. (Clifton) .....           | 102           |
| Edward Procter, Esq. (Strood) .....            | 31            |
| W. G. Walford, Esq. (Hertford) .....           | 15            |
| Vincent Jackson, Esq. (Wolverhampton) .....    | 3             |
| Wm. Soper, Esq. (Stockwell Road, Surrey) ..... | 28            |
| E. W. Watkins, Esq. (Towcester) .....          | 1             |
| J. K. Spender, Esq. (Bath) .....               | 15            |
| Dr. Kelly (Taunton) .....                      | 3             |
| Dr. Coates (Bath) .....                        | 2             |
| Dr. J. Hughes Bennett (Edinburgh) .....        | 4             |
| C. F. Hodson, Esq. (Bishops Stortford) .....   | 34            |
|  | 163           |

The aggregate, as you will see, is far too small to serve any of the purposes for which the inquiry was instituted. I will preserve these Schedules, in the faint hope that, during the ensuing year, this branch of the Therapeutical Inquiry may yet receive at the hands of our members the attention it merits. Sincerely thanking those gentlemen who have been at the trouble to send me their Schedules, I am, etc., CHARLES F. HODSON.

The Chantry, Bishops Stortford, July 27th, 1864.



# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

THE

## ADDRESS IN SURGERY.

BY

G. M. HUMPHRY, M.D., F.R.S.,

SURGEON TO ADDENBROOKE'S HOSPITAL.

MY reluctance to undertake the present task, and my diffidence in attempting it, are, in a great degree, counterbalanced by the pleasure and pride that I feel in addressing you in this place, at a period which may, I think, be regarded as an era of no small importance in the social relations and the science of surgery.

If we look back to those early periods when the light of history shines obscurely, and tinted with chivalry, through the mists of fable, we learn that surgery was, as we might expect from the nature of things, the elder brother, perhaps I should say the father, of medicine. The first cultivators of our profession—Chiron and Æsculapius, Podalirius and Machaon—were chiefly occupied in surgery. That it was an honourable vocation is proved by the fact that demigods and heroes, princes and priests, devoted themselves to it, and with such success as to be deemed worthy of deification among men, and of incurring the hostility of Pluto.\* Still, knowledge was little, superstition and fancy were great; and all played their part, the two latter the chief part, in helping nature to heal the wounds which man inflicted on man; for the work consisted chiefly in the treatment of injuries. Hence, for many ages, and in most countries, the offices of priest, of necromancer, and of surgeon, were combined in one person. Internal maladies soon came in for their share of speculation, of spells, and of drugs; and the *ιατρος* of the Greeks, the

“*ἀνὴρ πολλῶν ἀντάξις ἑλλῶν*”

was a general practitioner. Indeed, all the knowledge of those early times was within the grasp of one mind, and was included in the study of each of those who bestowed much attention upon education. Physics and metaphysics, philosophy and anatomy, were blended, or rather grew up together, and served to elucidate as well as to confound one another. Thus Plato entered into physiological discussions respecting the functions of the body and the effect of their derangements in inducing morbid conditions of the system. It is not improbable that Pythagoras acquired

some knowledge of anatomy by the dissection of animals; and Aristotle has left us the first regular treatise on comparative anatomy. Indeed, it was not till the parings and the additions made in the Alexandrian school had given substance and individuality to the several sciences, that they admitted of separation from one another. Then medicine began to be studied with much assiduity, distinct from, though in company with, philosophy and theology; the dissection of the human body was first practised; the department of surgery was separated from pharmacy and dietetics, and there seemed good promise of much progress in them all.

A promise soon to be broken; for no sooner had this point been attained than all was again thrown into confusion, and the sciences were reduced again to chaos by that disorder of nations and conflagration of learning which were typified and aided by the Alexandrian fire. Science was, indeed, well nigh consumed; its only representatives in Europe, amid the general return to superstition, magic, and astrology, being alchemy and the like silly strainings after the impossible; the very folly exhibited in the search for the philosopher's stone and the elixir vitæ shewing that some such ignoble though potent stimulus was necessary to keep alive any germ of science at all. Islam, for a long period, afforded it the only shelter; and in Arabia, where chemistry seems first to have acquired an individuality, amid the strange philosophising works on medicine, some additions were made to surgery by Rhazes and Albucasis; but the savage proceedings with knife and cautery tell of no real advance in practice.

The great mistress of the world, of military and orderly rather than of philosophical genius, was no zealous patron of science. Even in the zenith of her power and refinement, when literature held a worthy place in her courts, medicine was at so low an ebb that its practice was prohibited, and its professors were banished on account of their barbarous and unsuccessful proceedings. These interdicted mutilators were practitioners both in medicine and surgery. They included none of the higher families, few even of the free Romans; but were chiefly Greeks and Asiatics, or slaves. The honour of being the first native Roman physician of eminence, as well as of being the first who treats of surgical operations, was reserved for Celsus.

That second mistress upon the seven hills, whose power rested on the spirit rather than the sword, and whose empire, based upon the deep yearnings and secret motives of man, was destined to exert so wide and lasting an influence upon the human family, was far too wise to neglect the great engines of philosophy and science. Though she watched them with a jealous eye, and reined them with a nervous hand, that indicated a consciousness of fault, and therefore of weakness in her system, she could not but encourage them as subsidiaries to her stability and her power; so the lamp of knowledge began to glow in her cloister, and shed light into the darkness around. The priestly and the medical offices were again united; and medicine and surgery derived some benefit from the slight education of the ecclesiastic. Still there was little progress. Science was extremely low. In our own country it can be scarcely said to have existed till the intermingling of people consequent on the Crusades, the breaking up of the feudal system, and, above all, the discovery of printing, helped to loose the bands of

\* It is related that the death of Æsculapius was due to the jealousy of Pluto, excited by the numbers whom he rescued from the grave.

superstition, and gave a new impulse to knowledge. The increasing time and attention required for the treatment of the body, and the gains consequent on it, diverting the monks too much from their appropriate duties, necessitated a change. We find, accordingly, that surgery, as being the most obviously inconsistent with the priestly office, was first detached and forbidden; and it fell into the hands of smiths and barbers. The separation, thus a second time commenced, was by no means beneficial. Medicine, detached from the more lucrative branch, fared badly enough, and seems to have consisted chiefly of cabalistic notions and strange concoctions from the animal and vegetable kingdom; and, under the sign of the forge or the bandaged pole, little could be expected for surgery. No wonder that astrology and magic, the sympathetic powder and the royal touch, were needed as auxiliaries to the searing irons, the tents, and the unguents.

The impulse given to the study of human anatomy at Bologna, in the fourteenth century, and the foundation of schools in Montpellier and Vienna, as well as in Paris and Italy, aided by printing in the fifteenth century, gradually rolled back the cloud of ignorance from east to west, and produced their effect in England, especially upon medicine. It made rapid strides. The learned of our Universities not unfrequently took the honourable degree of doctor of medicine, visited foreign Universities, especially Bologna, Padua, Salerno, and Paris, and maintained that position in our court and country which their learning and their profession deserved. Through them Medicine held its ground on a level with Divinity and Law. The effect of reviving knowledge was much slower upon Surgery. Degraded from the monastic to a lower class, it little attracted the attention of the learned, and did not deserve the name of a science. Still it could not fail to glean something from the general spirit of improvement; and its practical character made some amends for other imperfections. The surgeon-barbers were the more dignified section of their order, and were incorporated as a separate body by Edward IV. In the field of Agincourt the body-surgeon of the king, and the surgeons of the army, were held in some estimation. Each succeeding sovereign had his serjeant-surgeon; and patients in the hospitals were consigned to the care of the surgeons as well as of the physicians. Hence it is scarcely credible that the incongruous connexion between the surgeons and the barbers should, even nominally, have continued so long as the time of George II, and that not till the beginning of the present century were the surgeons incorporated as a separate body.

During the last century, though I cannot but fear that medicine has, in some degree, descended from its high estate, there is no question that surgery has advanced with rapid strides; and, through its connexion with pathology, and the clearer enunciation of principles deduced from a careful observation of facts, has acquired the position of a true science. It is no small satisfaction to know that a scientific cultivation of their profession has formed the real basis of the reputation of the most eminent surgeons of the past and the present generation. We cannot but cherish the recollection that it was by the renowned surgeon of our boyish days, in whom zeal and patience met in a rare degree, that anatomy and pathology were pushed to the utmost verge the unaided eye could

reach. Look round some of our best Museums, the choicest specimens in them still proclaim the master-hand of Astley Cooper; and remember that they were made in the zenith of his career, and in the later periods of his life. The early mornings, snatched from days of an unequalled professional career, were eagerly devoted to the tedious work of unravelling the anatomy of the breast, the thymus, and the testicle.

In him who has lately passed from among us, full of years and full of honour, the physiologist, the philosopher, and the sound practitioner, was ever present the anxiety to attract others along that path of science which he had himself found so sure a way to success. My last conversation with him was on the question of rendering our Universities more available to our profession for that purpose. Full of honour I have said he was; and yet I could have wished that an additional mark of that honour—the well-earned tribute of a coronet—had been allowed, in the person of Brodie, to testify to a due appreciation of our profession.

The survivor of that illustrious trio, who still helps to bear the burden of the day, has contributed no less than the other two to widen the area of our knowledge, and to build up surgery securely upon the basis of physiology and pathology. His lectures, dating nearly half a century back, remain, to my mind, the best embodiment of surgical science ever written, and have done more than any other work to disseminate sound views of pathology and correct principles of treatment. Of Cooper, Brodie, and Lawrence we may well be proud; and not we only, but this country and this age. I need but mention the names of Bowman and Paget among those now occupying the foremost rank, to prove that deep research in physiology and pathology is still an acknowledged road to surgical eminence. Long may it be so! May it be so to a greater extent than it is.

To a greater extent than it is; for let us not boast too much. It needs no lynx's eye to see that the evil, the *auri sacra fames*, which always has, and which doubtless always must, enter more or less into our composition, and which should therefore be the harder fought against; the evil which had much to do with our great degradation in mediæval times, and which has of late been dragging upon medicine, is exerting its influence upon surgery. Few are attracted to our ranks except by the hope of a livelihood, to which practical work offers the readiest and the surest prospect. Even of those who, in early life, are induced by disposition or ambition to cultivate the science, nearly all are soon drawn away into the more lucrative paths of practice, and become wholly engaged in them. Their very success in the one leads them to desert it for the other:

"Science self destroys her favourite sons."

She tells them how little of direct reward, of that kind of reward which most men seek, she has to give. She shews them, too,—the most discouraging revelation of all,—how hard it is to link her on to the work we have to do, the work of stopping disease and repairing its ravages; and how much harder it is to render her available in scanning the character and meeting the fancies of those we have to treat.

The subdivision of labour also,—a necessary consequence of the ever-widening area of the field of knowledge, and the rapid increase of wealth,—conduces to the same result. The great practical gain attendant



thereon is shewn by the improvement which has, of late years, been made in the treatment of so many diseases; but the loss to the profession as a science, from this narrowing of the range of observation, and this concentration of thought upon special subjects, must, I think, be admitted. It is an evil difficult, impossible directly, to combat. Indeed, the overweening practical tendencies of the age, of which our profession does but furnish an example, can only be counterbalanced by giving greater heed to early training, to education, that is, during the period when the mind has not yet become absorbed in the engrossing avocations of money-making life.

To do this, to prolong that period, to promote high mental culture and refinement of thought, to foster the taste for literature, and to prevent its being borne down and swamped by the ever-swelling tide of practical energy, is the especial work of the Universities. Never were these noble institutions more required; never was there greater scope for them, and greater opportunity, and, therefore, greater responsibility. Their influence upon education, radiating through the public and private schools, pervades the whole land. We look to them to hold up the banner of science at its proper level. We ask them not, indeed, to forsake the ancient and approved standards. Let classics and mathematics, logic and theology, wave as proudly and as securely as ever: but let other pennons float beside them. Other sciences have risen up, and claim their share of attention and assistance. By standing forward as the nursing mothers of these sciences, by fostering them judiciously, by controlling their wayward tendencies, by holding them up above the din and clatter of the world, by promoting their study in a calmer, higher, more philosophic manner than could otherwise be done, the Universities will be exercising their proper sway over the great onward movement, will be promoting the revival of a truer spirit of philosophy, and will be assisting it to harmonise and keep pace with the practical genius of the age.

Surely, gentlemen, these remarks are not uncalled for, are not inappropriate, at this time and in this place; for I may ask, what have our English Universities done for surgery? What influence have these cherished and richly endowed seats of learning exerted upon our science? We must answer, almost nothing, except the little derived through its partnership with medicine. Upon surgery, directly, they have had little or no effect. Very few of those trained in our colleges have entered its ranks; fewer still have risen to eminence in it.\* Not that surgery was altogether overlooked. We find in the statutes of Henry V and Elizabeth provisions for granting a license to practise in surgery; but it is probable that this referred to practice within the Universities, just as the licenses of the London Colleges of Physicians and Surgeons referred to practising in the city and its immediate vicinity. At any rate few availed themselves of the privilege; and the statute had been obsolete for many years.

The real cause of the Universities having been so little connected with our profession, especially the surgical branch of it, is probably owing to their not being metropolitan. The tendency, in this country, for things to adjust themselves according to circumstances, rather than to be moulded by the directing

agency of imperial rule, has shewn itself in this. London, from an early period, the chief and most increasing centre of trade and of fashion, of government and of literature, took some steps, by the foundation of the Colleges of Physicians and Barber-Surgeons, and the Apothecaries' Company, after the model of its guilds and other corporate bodies, to secure the welfare and the proficiency of those who practised the healing art within its district. The provincial towns, left without such provision, or the means of supplying it, naturally looked to the metropolitan institutions. Thus the London colleges became long ago, in reality, what they have only recently been named, the Colleges of England. In awaking from its lethargy, in reasserting its dominion over surgery as well as medicine, and in aspiring to control the general practice throughout England, the College of Physicians has taken an important step, the full effect of which can scarcely be at present determined. While the more liberal charter of the College of Surgeons, and the institution of the fellowship, must raise the character of that body, and bind it more closely to its provincial members. Had the Universities been situate in London there is every probability that they would have been, in England, as they are in some other lands, the great portals of the profession, the dispensers of surgical as well as of medical qualifications throughout the country.

But is there no part left for Oxford and Cambridge in connexion with medicine and surgery? Is the influence of these Universities upon our profession to be allowed to dwindle and die out? Gentlemen, I think it will be a serious loss to us if it be so. I think the history of the past, and the features of the present to which I have alluded, tell us that an important part still remains for them to play in relation to us. It is highly desirable that the members of the profession should be drafted from different classes of society, and trained in different ways; and though it is not to be expected that the Universities can contribute more than a small proportion to the number of those engaged in practice, yet if only some of that small proportion, highly educated, and imbued with a real love of learning and a desire to cultivate science for science sake, could be annually added to our body, how great would be the boon. The heaven thus infused would have its influence upon the whole mass. It would induce a higher system of teaching in our schools, and would help to resolder the links of the chain that should bind medicine to literature and philosophy. Many such men wander forth from the Universities not knowing whither to go, or where to direct their energies. My longing hope and heart's desire for surgery is that more of them should be drawn into her service. Some have recently entered; and the good work they have done is full of promise for the future. And I cannot but trust that the recent recognition of surgery in this and some of the other Universities in the United Kingdom, will, in course of time, tend to enlist greater numbers of their graduates into our ranks, and will conduce to a more genuine and successful prosecution of our science.

And surely the science that deals with the aberrations and the restorations of the noblest and most complicated of nature's works, is no unworthy object for the lifelong energies of the highest mind. It is the topmost branch of the tree of physical knowledge. True, the very height and complication of our science remove it further than most others from the

\* Sir Edward Home was a member of Trinity College, John Steane, M.D., founder and first president of the College of Surgeons in Ireland, was a member of Sidney College.

region of calculation, and deprive it, in some measure, of definiteness and exactness. If, with all the present accuracy and range of mathematics, and knowledge of material, the construction of an iron bridge is still deduced from experiment rather than from calculation, we cannot be surprised that much uncertainty attends the investigation of the functions of the human body, and that the treatment of its diseases is often empirical rather than deductive; but this only proves the difficulty of the science, and the need of applying to it the highest powers of the mind strengthened with the best aids of education. I cannot doubt that rich fruit would, in due time, follow from the bestowal upon medicine and surgery, and the collateral sciences, in Oxford and Cambridge, of a fair share of that cultivation and favour which are granted with so liberal a hand to the more peculiar studies of these places. I trust that, ere long, this will be done. Physical science is gradually taking more root in these Universities; and it is for you, with your voice and interest, to aid the residents in Oxford and Cambridge to obtain for it, and, through it, for our profession, that *status* and consideration which are their due. That keen and deeply interested observer of passing events, especially of those relating to science and the Universities, the late Dean Peacock, entered warmly into this view, and said to me, not long before his death, "I am astonished that your profession does not look more closely to its interests in our Universities. Depend upon it, it will have reason to regret its apathy. It will assuredly lose ground in position and in public estimation."

Excuse my dilating so long upon these matters. I feel that the occasion and the place justify, if they do not demand, some allusion to them; and the deep interest I take in them would scarcely allow me to forbear.

I will proceed now, in closer conformity with the duty assigned me, to a brief review of some of the more important changes that have taken place in surgery in my time (eight-and-twenty years), and in my own experience. I should rather say, to give a hasty account of my own experience of them.

The marvellous results in our social system, from the application of steam to the transmission of our bodies, and electricity to the transmission of our thoughts, make us impatient of ordinary progress, and impel us to look for extraordinary steps in the advance of surgery. Happily we do not search altogether in vain. There is one discovery which, from the amount of human suffering, and that of the sharpest kind, it has spared, deserves to be classed in the same rank with the great inventions I have named. On the benefits of CHLOROFORM, which may be taken as the representative of ANÆSTHETICS, in this respect, I will not dwell. They are too patent to need recital. I think I am warranted in speaking of this benefit as a pure gain: that is to say, though some evils may attend upon the use of chloroform, others equally great have been removed; so that the dangers of operative surgery have not been increased, while its horrors have been greatly diminished. It is too much to expect that so powerful an agent, quickly pervading the blood, and paralysing the sensorium, can be employed without occasional damage, even fatal damage; and the instances in which this occurs are most appalling and impressive. Happily they are few; and, with increasing experience and care, their proportion may, perhaps, be diminished. We are

thankful, in this place, that we have not hitherto witnessed any disaster from its use; which must, in no small degree, be attributed to the care bestowed upon its administration by our house-surgeons. The after ill effects have been confined to depression, nausea, and sickness. These have been by no means common, and have seldom been attended with serious consequences. In a few cases I thought that, by lowering the patient's strength, they contributed to determine the fatal issue; but that has not been quite certain in any instance.

Chloroform has greatly widened the range of operative surgery, especially of the tentative and conservative kind. There is no question that operations can be more carefully and better done under its influence; and little excuse is now left for secondary hæmorrhage. That sequence is almost always attributable to negligence in the surgeon, not to disease in the patient: that is to say, it occurs far less often from a fault in the vessel, or in the healing process, than from carelessness in the application of the ligatures. Had chloroform done no other service than that of inducing us to bestow more attention upon this stage of an operation, it would have deserved well at our hands.

While dwelling upon the blessings of this discovery, let us not forget that, though the medium we use is due to the zealous and enterprising physician of whom Scotland is justly proud, the credit of the introduction of anæsthetics into operative surgery belongs to America, and is one of the results of that energy of character, of that impatience of *antique vice*, and that aptitude for meeting the ordinary requirements as well as the extraordinary emergencies of life, which have there been so highly developed. It has often been a matter of surprise to me that these qualities have not told more upon surgery; and yet I am not unmindful of the names of Mott and Warren, of Sims and Müller, and of the obligations of pathology and operative surgery to them and others of our transatlantic brethren. This one addition, however, may be well accepted in lieu of many.

Blessing as chloroform has proved, it could scarcely have been so considered, rather might it have been regarded as a curse, had not the way for it been paved by a gradual increase of knowledge and an improvement in practice, especially in the TREATMENT OF WOUNDS. This has, from the earliest periods, occupied a large share of the attention of surgeons; and no feature in the history of surgery, or, indeed, of the human mind, is more curious and more interesting. The ingenuity with which mischievous theories have been promulgated, and impediments to nature's reparative processes have been devised, as well as the tenacity with which they have been retained, are scarcely credible. The greatest advance, perhaps, ever made in our art was effected through the acute mode in which superstition was combated with her own weapons by Sir Kenelm Digby and his sympathetic cure. The notions of purification and mundification had taken such deep hold on men's minds, and the practices with spells and setons, with caustics and irritating unguents, were so firmly grafted upon them that nothing short of a proceeding, the very absurdity of which gave it an air of mystery, and so constituted a claim to respect, could suffice to uproot them. This transference of the mischievous applications from the wound to the inflicting weapon,—

"And with a charm she stanch'd the blood,  
And salv'd the splinter o'er and o'er;"



was a grand success of that use of deception to enforce truth which is the basis of the highest order of quackery. In spite, however, of this great hint, and the important principle of "union by first intention," thus introduced, strong prejudices in favour of plasters, unguents, bandages, and other interferences, have descended even to our time, and are still too prevalent. In Addenbrooke's Hospital we have, for several years, discarded these applications almost entirely in the management of ordinary wounds and after operations. The edges of the wound are kept in apposition by sutures if any assistance is required, and are then left quite uncovered, quite exposed to the air, for the first few days; no plaster or bandage, not even lint wet or dry, being used. After a time fomentation, or poultice, is applied if there be need; but often the healing of the wound has saved further trouble. By this mode the wound is kept cool and clean, and is exposed to the air and to the eye, so that its condition is known, all the distress of the subsequent removal and reapplication of dressings is avoided, and our patients are not unfrequently discharged, after amputation and other operations, without having experienced one twinge of pain during the operation or subsequently. This anæsthetic treatment of wounds is the proper sequel to the anæsthetic mode of performing operations. I am glad to find that the practice is finding its way into other hospitals, and trust that ere long it will be still more general. Adopting it, we may be said to have pretty well realised the *ne plus ultra* in the treatment of wounds.

It has not appeared to me that METAL offers any decided advantages, as a material for SUTURE, over thread or silk, provided these be properly, not too tightly, tied; and certainly, if there is much tension, the metal cuts its way out sooner than the others, and is, therefore, less serviceable. This I have found by inserting thread, or silk, and metal sutures alternately in the same wound.

The LIGATURE is so effective a method of securing blood-vessels, and its disadvantages, which seem to have been rather magnified, are so much counterbalanced by the drain it affords from the depths of the wound, that I have not resorted to either of the recently proposed modes of arresting bleeding. I still regard the ligature as the most important addition ever made to surgery, and have already expressed my belief that secondary as well as primary hæmorrhage may, in almost all cases, be prevented by its proper application. Having this faith in it, I have hitherto been content to leave the proving of its proposed substitutes to others. Still, as the ligature does necessitate a slight amount of sloughing and suppuration in the wound, I shall be glad if experience shews that even this good thing is superseded by a better.

In the management of patients after operations, surgeons are relinquishing the idea that any particular plan, stimulating or lowering, sedative or otherwise, is, as a rule, to be enforced; and are falling back upon the common-sense view, that each case is to be treated according to its special requirements, due regard being had to the habits, the appetite, and the inclination of the individual, and due regard being also had to cleanliness and fresh air. Simple things are, after all, the most important; and to nothing, in late years, can we look with more unmixed satisfaction than to the increasing respect that has been paid to plain hygienic rules. In a stricter observance of them, advancing civilisation provides an antidote to

one at least of its own poisons; making the towns to vie in healthiness with the rural districts, and removing some of the greatest opprobria from our hospitals.

We know, however, too well that the tide of increasing success is not without its ebbs. We do not flatter ourselves, as we blot out or mitigate certain classes of diseases, that others will fail to spring up and flourish. Such an illusion would at once be dissipated by the mention of that malady which has of late years proved so frequent a cause of death after operations, and which has been named, somewhat inappropriately and unfortunately, PYÆMIA.

The name, I say, is inappropriate; for though it is highly probable that the disease is associated with, or dependent on, some morbid condition of the blood, there is much reason to presume that that condition is not a result of the admission of pus into the circulating current. A tendency to suppurative inflammation in various parts of the body, accompanied by certain phenomena of a peculiar and rather variable kind, is what we observe, and is nearly all we know about this formidable affection. The tendency is commonly, but not always, associated with a wound or sore; and there is often a premature and irregular coagulation of the blood, such as we find under many other circumstances,—clots forming quickly after, or perhaps before death, and containing sometimes white patches of varying consistence, which resemble spots of pus, but which are probably composed of clustered white corpuscles, or fibrine alone. Of the dependence of this condition of the blood upon the accidental admission of pus from the wound, there is little or no evidence. The disease is more liable to occur in some constitutions than in others; and is, I believe, more frequent in the metropolis than in the provinces. In this district we do not very often witness it; and when it does appear, it is rather the wind-up feature in a sinking case than a real malady.

There is often much in a name; and the name "pyæmia" is, I think, unfortunate as well as inappropriate. It is suggestive too much of an accidental, and too little of a constitutional cause. It thus rather tends to divert attention from those precautions by which the disease may be warded off, and it leads too directly to inactivity and despair when the symptoms have commenced; whereas, if we regard it not exclusively as an accidental invasion, but as, to some extent, a constitutional disease, we shall be more induced to seek its prevention by measures which are conducive to the general health before and after operations; and when it has commenced, we shall not at once give up the case as a hopeless one of blood-poisoning, but shall still endeavour by general means, by stimulants, or the contrary (according to requirements), by cleanliness and abundance of fresh air, to improve the condition of the patient; and we shall find that success will sometimes reward our efforts. Indeed, close observation shews us that this "suppurative fever," as it may be better called, has its milder as well as its severer forms. There are instances in which it consists merely of a slight febrile attack followed by one or two abscesses which burst, or are opened and do well, and which do not much retard the recovery of the patients. In such cases the idea of blood-poisoning scarcely occurs to us; and yet they are of the same kind with the formidable and rapidly fatal forms of the disease, and—which is the important practical point—are connected with them by an intermediate

range of cases varying in severity, and in the opportunities they afford for treatment.

My own impression is, that the more frequent occurrence of this disease in late years is mainly owing to the richer dietary of our people; and that its prevalence is, generally speaking, proportionate to the amount of animal food habitually consumed. It is most common in the upper classes, and in the metropolis and larger towns, where wages are high and living is high; and it is least seen in the agricultural districts, where the people are, to a greater extent, graminivorous. The affording a comparative freedom from this disease is, I believe, one of the ways in which the ordinary spare diet of the agricultural labourer renders him a good subject for operations, and give a favourable aspect to the statistics of provincial hospitals.

To the practice of administering OPIUM, either by the mouth or hypodermically, after operations, for the purpose of preventing the pain that is likely to follow them,—a practice which has many advocates,—I am, in most cases, decidedly opposed. The immunity from suffering, which, be it remembered, does not by any means always occur, and which improved treatment of the wound will render still less common, is, in my opinion, dearly purchased by the languor and enervation that often follow the opiate. As a general rule, I prefer that my patient should run the risk of a sleepless night after an operation, rather than incur the effects of the sedative.

In the old capital operations, some changes have been introduced, but no very decided improvements. In LITHOTOMY, we do not excel Cheselden and Martineau. The lateral operation, as practised by them, is, notwithstanding the suggestions by Alanson and others, probably, on the whole, the best mode yet known of removing a stone from the bladder by cutting. Lithotripsy has been perfected,\* has been over-rated, and is acquiring its proper place in our estimation. In Addenbrooke's Hospital we have not very often resorted to it; because, in the class of patients who there come under our care, it is difficult to ascertain the duration of the symptoms, and to estimate the size of the calculus. These persons are, moreover, commonly intolerant of the repetition of operative procedures; and, in the cases that are suited to lithotomy, we find that lithotomy is attended with very little danger and very little pain. I think that, except in a few practised hands, and in the upper classes, it will be found, on the whole, to be less successful than lithotomy, even in the cases that seem most fit for it.

With regard to AMPUTATION, it seems a question whether the double flap incision will long survive the skilful hand that gave it a temporary ascendancy. Competitors for favour are rising in the quadrilateral methods of Teale, Spence, and Carden;† though they have scarcely yet been sufficiently tried. Many surgeons are rather falling back upon the old circular

mode, which recommends itself by its smaller wound and its much smaller cicatrix, as well as by the greater facility for securing vessels and the less liability to secondary hæmorrhage that attend it. In the commencement of my practice, actuated by the growing feeling of the time, I performed the double flap amputation exclusively. Mr. Lestourgem usually did the same; and we had the advantage of comparing it with the circular operation, admirably performed by our colleague Mr. Hammond. The result has been, that we have, to a great extent, relinquished the flap. Still, in the thigh, I think that the double flap, or some modification of the flap operation leaves the best stump, especially if the comparison be made after a few years have elapsed; and I still usually adopt it, when amputating at that part, in feeble delicate persons, having observed that in such cases, where early union is most important, there is less liability to reopening of the stump and protrusion of the bone after the flap than after the circular incision.

The allusion to Liston, just made, reminds me that from the Edinburgh school has proceeded a freer, bolder, yet more precise style of performing operations, which by him, and by the present Professor of Surgery at King's College Hospital, has been carried to a degree of perfection that will probably never be surpassed; while to the occupant of the chair of Clinical Surgery in Edinburgh we owe the introduction of new and important operations, as well as other improvements in practice. The amputation at the ankle-joint, introduced by him, has preserved many a useful limb; although my own limited experience inclines me, in most cases, to give a preference to the mode of performing the operation proposed by Pirogoff.

Syme's operation for the treatment of STRICTURE I have performed in eight severe long-standing cases; and I am satisfied that the tendency to a recurrence of the disease, though it exists and must be provided against, is less determined, and therefore more easily under the control of the patient, than it is after the ordinary modes of treatment. Nevertheless, we must hope that additional improvements in the process of dilatation, gradual and rapid, will render it unnecessary to resort to incision for the treatment of stricture.\*

THE EXCISION OF DISEASED JOINTS, though not originating with Professor Syme, yet received its first real impulse from his successful cases of excision of the elbow, and has now been so extensively practised, and has excited so much attention and discussion, that we ought to be able to arrive at some conclusions respecting it. Still, in a question involving so many considerations based, in each instance, upon uncertain data—such as the constitution of the patient, the reparative power in the joint, the relative prospect of recovery after amputation or excision, etc.—positive statements betoken ignorance and prejudice, rather than fair judgment based upon experience. Unquestionably, the introduction of the operation has increased the difficulties and responsibilities of the surgeon. It is, however, on difficulty and responsibility that true usefulness and dignity are based; and the fear of encountering them will have little effect in deterring the true lovers of our profes-

\* I may refer to Mr. Fergusson's plan of removing the fragments, at the time of the operation, by means of a small lithotrite or scoop (described in his recent lecture at the College of Surgeons, which seems to have answered well in his skilful hands).

† *Edinburgh Medical Journal* and *BRITISH MEDICAL JOURNAL*, April 16th, 1864. I have performed Teale's operation in the thigh in six cases. Of these, three (two severe traumatic cases, and the third a case of acute suppurative in the leg and knee-joint—all therefore, unfavourable cases) were fatal. In one of the three that recovered, there was a tendency to protrusion of the bone through the flap. The two others recovered quickly; and a good stump was gained in each.

\* The performance of the operation by subcutaneous incision, as proposed by Dr. Dick at the Royal Medical and Chirurgical Society, June 11th, may be an improvement upon the mode in which it has hitherto been done.



sion from entering upon new fields of practice and of hope.

The frequent success and the slight danger attendant upon excision of the elbow are generally admitted to justify its trial in most of the cases in which amputation would formerly have been performed, as well as in some others.\* In the shoulder, when discharging sinuses indicate ulceration of the articular surfaces, and the patient's health is failing through this cause, excision offers a good prospect of saving both life and limb, provided the glenoid cavity is removed, as well as the articular end of the humerus. It should certainly be attempted.† Excision of the wrist has scarcely been attended with sufficiently satisfactory results in my own practice, or in that of others, to encourage its repetition. Of the three instances in which I have performed it, in one only was a moderately useful limb retained.

Excision of the hip I have not yet attempted. I have proposed it in a few cases which seemed likely to go on to a fatal termination, but have not felt justified in urging its adoption, for the following reasons. *First*, the question arises chiefly in children and young persons; and we know that instances are not uncommon in which they survive, and the joint becomes ankylosed, so as to bear the weight of the body well, even after extensive destruction of the articular parts has taken place. *Secondly*, it appears to me that the acetabulum, forasmuch as it is usually as much or more diseased than the head of the femur, should be gouged or sawn out, to afford a fair prospect of the wound healing. This would, of course, necessitate more or less interference with the pelvic cavity, involving a liability to suppuration there; and I have felt doubtful as to the prospect, in case of recovery, of the limb sufficing to bear the weight of the body. Moreover, I have not thought the results of the experience of others in this operation, so far as I have been able to glean them, very encouraging.

The construction of the ankle-joint and the disposition of parts about it are by no means favourable to excision; and the operation in this part must always be attempted with much hesitation. I have performed it in four cases. In two, good, firm, useful feet remained, enabling the patients to walk well. In a third, the disease was very extensive, necessitating the removal of the whole of the astragalus and navicular bone, as well as the ends of the tibia and fibula; and amputation was subsequently performed. In the fourth, suppuration continued, phthisis ensued, and the patient died six months after the operation. In a lad, in whom I removed the navicular bone with the adjacent surfaces of the astragalus and cuneiform bones, as well as parts of the os calcis and cuboid bone, the recovery was complete; and, four years afterwards, he could run about as though nothing had happened; indeed, it

could scarcely be credited, that so large a part of the instep had been taken away.

But it is in the knee that the great triumphs of excision have been obtained and are to be won—perhaps the greatest triumphs of modern surgery. How often has one lamented that the whole lower limb should be sacrificed by incurable disease of this joint! and how often has life been sacrificed, rather than the mutilation of amputation should take place! How have we all longed for some substitute for that mutilation—some mode of clearing away the hopelessly diseased parts, and leaving a serviceable limb! Yet how reluctant a reception has this operation met with! How many objections were thrown at it! It would be fatal in its issues. The diseased parts could not be thus removed. The wound would never heal, and the bones would never grow together. The limb would be useless. The disease would return. The limb would not grow. I must acknowledge to having once entertained these prejudices myself; and I was only induced to a trial of the proceeding by its favourable results in the practice of Mr. Jones of Jersey. Since that, I have performed it in thirty cases—an experience which is probably greater than that of any other person except Mr. Fergusson, to whom, I need scarcely say, we are indebted for the revival of the operation. Six of my patients died; of these, one was a case of acute suppuration of the knee in a child—a case unfavourable for any kind of treatment; another was a severe contused wound of the knee; a third—a young woman in whom the wound was proceeding remarkably well, indeed, was nearly united—died, ten days after the operation, from hæmatemesis supposed to proceed from a chronic ulcer of the stomach. The fatal issue in this case can, therefore, scarcely be said to have had any dependence upon the operation. It would probably have occurred had the operation not been performed. Three sank after amputation consequent on the excision. Five others underwent amputation, and recovered; and the remainder—that is, nineteen—regained very useful limbs.

The general conclusions at which I have arrived from the observation of these cases, and much thought and reading on the matter, are, that in the cases in which the condition of the joint is such as *directly* to imperil life—severe acute suppuration, for instance—amputation should commonly be performed; but where the condition of the joint is such as to undermine the health gradually, and so endanger life only *indirectly*, or merely to destroy the usefulness of the limb, excision should generally be resorted to.\* This latter class of cases, let me remark, where life is spared, but the usefulness of the limb is lost, forms no inconsiderable or unimportant a class, especially among the agricultural poor. In them the type of disease is not, for the most part, acute, but enduring and recurrent. Inflammation of the knee creeps on month after month, arrested by occasional treatment in hospital, but not ceasing until the joint is so marred as to be unable to bear the body and permit

\* I have excised the elbow in twelve cases. Of these, nine regained useful limbs; three did not do well, being sickly persons, and dying of phthisis from six months to a year after the operation.

† I have excised the shoulder in three cases. Of these, two recovered with very useful limbs; the third died, not long after the operation, of acute phthisis.

It may be observed, that the reparative powers in the upper limb are greater than in the lower, while its exposures to injury are less, and its opportunities for repose are greater. Hence, a given amount of disease in it is, proportionately, more indicative of constitutional debility than in the lower limb. This should be taken into account in considering the question of excision in the upper limb; and it militates, to some extent, against the operation. The truth of this remark is entirely corroborated by my own cases, so far as they go; forasmuch as the failure of excision in the upper limb was, in each instance, due to a phthisical or unhealthy state of the patient.

\* I am supposing that they are cases, in other respects, fitted for excision; that is to say, that disease does not extend much into the shafts of the bones, and that the patient's health is such as to render it probable that he will bear the operation and the trials from suppuration, confinement to bed, &c., that are likely to follow it. The cases of scrofulous disease of the synovial membrane, which form a large proportion of the diseases of joints in this district, are, for many persons, not favourable for excision, but should not be excluded from it.

the movements of the limb. It is little satisfaction that the disease now ceases, or is cured, as we may be pleased to call it, if the limb remains a burden and a drag, instead of being a propeller of the body; and we feel no pride in seeing these crippled members carried about our streets. In the greater number of such cases, usefulness may be preserved or restored to the limb by excision, performed during the progress of the disease, or soon after its cessation; and, as far as my own experience goes—and I have tried a good deal—this cannot be accomplished with anything like the same good effect in any other way.

The excellent results of successful excision will not be questioned by those who have seen the patients walking and running about after the bones have become firmly united; and they will have perceived that all ground for apprehension of a return of the disease is excluded. With regard to the important question of the danger of the operation, I am probably making a fair statement in saying, that in acute cases it is rather greater, and in chronic cases rather less, than that of amputation under corresponding circumstances; whereas, in the important class of cases just mentioned, where disease has subsided after destroying the joint, and where the operation is undertaken for the purpose of reclaiming the limb to service, I think it will prove that the risk from this, as from most other operations upon bones, is very slight.

The various questions relating to this operation have, however, recently been so fully and so ably discussed by him who is best able to give an opinion upon them,\* that I will detain you no longer with my views regarding it, and will merely further observe, with reference to excision of joints—*first*, that it is very desirable—I do not say essential—to remove all the diseased joint structures, the synovial membranes, the cartilages, and the bones; and this combines with other causes to render cases in which the affection is chiefly synovial among the least favourable for the operation. *Secondly*, the surrounding tissues, being only secondarily affected, may be left, and will be sure to recover their natural condition, however much they may be thickened or traversed with sinuses, when the source of their irritation has been removed.

The remark, gentlemen, that an operation is a disgrace to surgery, has doubtless often grated upon your ears, as it has upon mine; and you have felt it to be either one of those truisms that need not be uttered, or one of those statements, plausible rather than true, that ought not to be made. True, it is only in the same sense that the imperfection of knowledge is a disgrace to man, or that the destructiveness of disease and the tendency to death are a disgrace to nature. While these remain, operations, well conceived and carefully performed, far from being a disgrace, will be an honour to surgery, and will furnish the greatest triumphs to our art. Advancing knowledge, instead of diminishing, serves to increase their

number; for, though it shows some to be unnecessary, it introduces more. It gives us, I grant, a fuller insight into the resources of Nature, and a greater reliance on them. It tells what we may leave to her, where we may assist and direct her; but it tells us also of her failures and her aberrations, and shows us more clearly where we should interpose to arrest her processes and to remove their products. While, on the one hand, we learn that popliteal aneurism may often be cured by pressure upon the artery or by flexure of the limb, we find, on the other hand, that the annoyances and dangers of hernia may sometimes be judiciously averted by an operation for its radical cure; that clefts in the palate may be closed, vesico-vaginal fistulae stopped, prolapsing wombs retained, etc., etc.

By nothing, probably, has the range of operative surgery been increased so much, and so usefully, and so safely, as by the introduction of SUBCUTANEOUS INCISIONS, attended with a knowledge of the mode in which healing, under these circumstances, takes place. The application of the principle to tenotomy has enabled us to make amends for some of Nature's shortcomings, has planted many a foot upon the ground which would otherwise have remained curled up and clubbed, and has restored many a squinting eye to vision and to beauty; while the reduction of dislocations and fractures has been facilitated, and various other deformities have been rectified.

In the treatment of club-foot, my own plan differs somewhat from that usually recommended. In the *first* place, instead of making two or more operations, I divide, at one time, all the tendinous structures that seem chiefly to interfere with the proper position of the foot. These, in *varus*, commonly, are the tendo Achillis, the plantar fascia, the tendons of the anterior and posterior tibial muscles, and of the common flexor of the toes. *Secondly*, I bring the foot into its normal position at the time of the operation, and fix it there. I have not found any failure of union of the divided parts from this; and a quicker, and, I find, better result, is obtained by it. *Thirdly*, I do not use Scarpa's shoe, or any other complicated apparatus, but merely a well-padded splint, secured on the side of the leg; and fix the foot in position, by its means, with plaster and bandage. It is necessary to do this very carefully, and to protect the leg and foot well with cotton wool; and the whole is removed and reapplied daily for the first few days. The earlier the operation is done, after the first month from birth, the easier is the treatment, and the quicker the cure.

That a proceeding, so easy and so often successful as tenotomy, should be pushed to excess, is only what we must expect. Tenotomy has, no doubt, been rather too frequent of late, and has diverted us from the good effects which may be, and which in olden time often were, obtained from extension well applied and perseveringly maintained. By recalling us to this practice, and showing us how it may be better carried out, and by reminding us that tenotomy is only the auxiliary to orthopædic treatment, Mr. Barwell has recently done good service.\*

\* See report of Mr. Fergusson's lecture at the Royal College of Surgeons, in the *Lancet* of July 16th. See also papers by myself on excision of the knee and its effects upon the growth of the limb, in the *Medico-Chirurgical Transactions*, vols. xli, xlii, and xlii. I can quite endorse Mr. Fergusson's opinion, that amputation has, in many cases, been performed after excision, when the limb might have been saved by longer patience, with, perhaps, further incisions to lay open sinuses or remove diseased bone. The dissection of some of my own early cases proved that I had been too hasty in removing the limbs; for the disease turned out to be less than I expected. Acting upon the information thus obtained, I have, by secondary incisions, saved some limbs, after excision, that at an earlier period of my practice I should have amputated.

\* The view of the etiology of congenital club-foot taken by Eschricht, which attributes the malformation to an imperfect unfolding, or unrolling, of the limb during the foetal state, does not appear to me quite satisfactory. I think no one can examine the distorted part without being convinced that there is something besides this—that an abnormal contraction of the muscles on the inner and inner side of the foot is, at least, an important element in the matter.



Let me here observe, that the effect of extension in subduing muscular spasm, and so inducing rest, which has its familiar illustration in the stretching out of the leg for the cure of cramp, is a most important principle, explaining some facts with which we were before conversant, and giving us certain new laws to regulate the position of diseased joints and limbs. Observation had already told us that the straight posture was the best for a fractured thigh. We now know that it is so, because in it the flexor or more powerful muscles are extended, and are, therefore, at rest. A patient suffers under diseased hip or knee, with, perhaps, ulceration of the cartilages. The agony is severe, and greatly aggravated by involuntary movements or spasms of the limb. The joint becomes bent; and the more it is bent, the more frequent are the startings, the greater the distress, and the quicker the progress of the malady. We administer chloroform, extend the limb, fix and support it carefully in that position by splint and bandage; and it not unfrequently happens, that immediate relief is given, a night of sleep follows, and the disease is arrested. The principle may be carried out under various circumstances, and in other joints. Indeed, the plan of fixing the limb in the extended position is, perhaps, the greatest improvement that has been made in the treatment of diseased joints. If I mistake not, it was first adopted by Mr. Key in affections of the hip-joint. By combining the two requisites of steadying the joint and quieting muscular action, it is in complete accordance with the views so fully and ably advocated by the late Professor of Surgery at the College of Surgeons.

OVARIOTOMY may now be said to have fairly run the blockade, and to be surely anchored in the harbour of legitimate surgery; and the success which has recently attended it in the hands of Clay, Spencer Wells, Bird, Baker Brown, and others, constitutes it one of the greatest achievements of British surgery—so great as at length to have excited the emulation of our brethren across the Channel, though it has hardly yet gained a place in our own metropolitan hospitals. That it has been slowly received in these hospitals, where men are hard occupied in combating disease in other forms, and are compelled to show a tendency to limit rather than extend their range of work, is no wonder. Fully aware of the great uncertainties, difficulties, and dangers inseparable from this grave operation, before undertaking it, I went carefully over the whole ground, literary and pathological, examining the specimens in various museums, and collecting all the recorded cases I could find. I came to the conclusion, that the prospect of success is, on the whole, proportionate to the fluidity of the tumour; that, where it is solid, the operation should not be attempted at all; that, where it is fluid, and the patient young or middle-aged—that is, in the most favourable cases—the prospect of success is about two to one. This, or a lower average of success, I thought sufficient to justify the operation in the ordinary run of cases, where the disease advances steadily, and is likely, after some months of misery, to terminate fatally. My success, however, has hitherto not equalled the average I deduced from the practice of others. Of four cases, one only recovered; she has since married and borne children; one died of tetanus, after she had apparently passed the ordinary dangers of the operation; and two others died, after a few hours, from hæmorrhage and peritonitis consequent on the division of extensive adhesions.

Of that strange disease—**SYPHILIS**—which seems to have a close relation to the gregariousness of men, and which becomes of increasing frequency, and therefore of increasing importance and interest, with the growth of our large towns, which forces itself upon the attention of the statesman and the moralist, as well as of the pathologist and the surgeon, and which has proved a puzzle to them all, no less than to the historian,—we have gained great additions to our knowledge, but, I think, not proportionate improvement in our treatment. If, as has been remarked, secondary and hereditary manifestations are more common than they formerly were, this may be due partly to the greater frequency of the malady; but may it not be also partly due to a less definite treatment of the primary indication, which is a consequence of the different views that have been promulgated? The mercurial plan, especially for the indurated form, is again in the ascendant, and, I think, deservedly so. Regarding the primary sore or spot as the continuing source, as well as the origin, of infection to the system, we can have no question of the importance of eradicating it as quickly as possible; and what we especially require is some more rapid and effective means of doing this. The milder caustics seem to me simply to increase the amount of induration; and the severer ones, even when freely applied, very often fail to destroy it. I was accordingly led to try the removal of the sore with the knife, when it admitted of being easily and completely insulated—in the cases, for instance, of chancre on the prepuce, especially near the margin, or on its exterior (and in this latter situation they are, in my experience, peculiarly liable to be followed by secondary symptoms). I am, in such cases, in the habit of removing the prepuce. The earlier it is done, of course, the better the prospect of complete eradication of the malady. Even at a late period, when secondary symptoms have set in, the primary lump still being large and hard, I have sometimes followed the same course, believing that the removal of that, which seems to be, not merely a source, but a maintainer of infection, would facilitate the cure of the patient; and I have found reason to be satisfied with the practice under these circumstances. The wound has in every instance healed kindly. I would warn those who may be disposed to resort to this summary method, that the incision should be carried quite wide of the base of the sore, so as to include a clear and considerable margin of healthy skin and tissue with it; for in this, as in cancer, the influence of the disease extends for an uncertain distance around its apparent site; and I have, in some instances, been disappointed at the recurrence of induration in the cicatrix, when I had not been sufficiently careful on this point.\* I would warn them also against giving too strong an assurance of immunity from a subsequent appearance of the disorder; for it is impossible to tell when the infection of the system begins, and whether, therefore, in

Moreover, the first position of the foot is rather that of grapes than of figs; which is owing to what the former deformity is very rarely congenital, while the latter very commonly is so.

\* This, taken with the fact that I have never known induration in the cicatrix to follow when the incision was made well beyond the range of the chancre, militates, to some extent, against the growing opinion that induration about the primary sore is an evidence and result of constitutional infection. I find from an excellent paper on Syphilis, by Dr. Veale, in the *Edinburgh Medical Journal* of last month, that he has also been in the habit of practising the excision of chancres, with good result.

any particular case, it has taken place; neither do we know what is the period of incubation, or whether there is any regular period; and I have seen secondary symptoms commence after the wound caused by ablation of the primary sore had healed with a sound soft cicatrix. They have, however, been slight. I think the prospect may be represented thus: If induration have not taken place, or is only commencing, the probability of an appearance of secondary symptoms, after the complete removal of the sore, is very slight; and, if they do appear, they are not likely to be severe. If the induration has set in, the operation will diminish the probability of their occurrence; and if they, in addition, have already appeared, it will facilitate their cure. After all, however, this treatment is applicable only to a few cases—to those, namely, where the prepuce or the exterior of the penis is the seat of the primary disease. I have not tried it in the female.

One's anxiety to quench at once, and as early as possible, the first spark of the disease, has, of late, been greatly heightened, in consequence of the disclosures, by Mr. Hutchinson, Dr. Wilks, and others, of its persistent vitality, smouldering on from generation to generation, interfering with development and nutrition, imprinting its tell-tale marks upon the teeth, the nose, and other parts, exciting or modifying disease in the organs of sense, the skin, and most of the internal organs, and bursting out, in the original sufferer or his descendants, in a variety of ways, and at protracted periods. This impresses upon us, more forcibly than ever, the conviction that the combined efforts of law, physic, and divinity are urgently needed to arrest the ravages of the disorder, and to check its deteriorating influence upon our race. It is possible that these views are exaggerated; and it must take more years of the patient investigation of many persons to analyse with precision the influence of this subtle virus upon the nutritive processes.

And along, or near by, the path of that investigation lie some of the hardest and most interesting questions in pathology—questions as to the origin, communication, and extension of disease—questions as to its relation with the nutritive and formative processes—questions as to the part which the blood and the tissues have in holding and in developing it—questions of the kind represented by the humoralism and the solidism of our forefathers. Let it not be thought that such questions—theories, if you will—respecting the nature of disease, are far beside the practical work of curing it, though they may seem to be so; and though, to excuse ourselves from the trouble of entering into them, we are willing to think that they are so. I feel sure it is quite the contrary. Good practice is ever closely allied to good theory; and it is hopeless to look for improvement in the one without advance in the other. Discoveries may appear to be accidental. They crop up, as it were, unawares and unexpectedly; but they have their laws; and one of those laws is, that they are usually made when the time—that is, the mind of the age—is ready for them. Hence, the same discoveries are often made by several persons contemporaneously. Or, if a discovery be made prematurely, before the time is ripe to appreciate and take advantage of it, it dies out and is forgotten, to be re-born in its proper season. Hence, the pathologist who, in his study, with microscope and crucible, investigates the obscure processes of disease, and gives us deeper insight into

its mysteries, is combating it no less truly and effectually, though less obviously and less directly, than the surgeon who is fighting it, hand to hand, in the hospital wards. The one primes the gun, the other fires the shot.

Indeed, to the *direct practical work* of surgery, that branch of pathology which we call morbid anatomy is scarcely second in importance to healthy anatomy. It is essential to anything like precision in diagnosis and confidence in treatment; and it is always a matter of regret to me that it is so little pursued in our schools, and that our rich museums are made of so little real use to our students. I have even heard eminent surgeons discourage their pupils from working in them. I am sure that those who have acted in opposition to such advice will agree with me that some of their most valuable knowledge was acquired from the study and comparison of specimens in museums.

And to the *science* of surgery, I need scarcely say, that pathology, in all its branches, is the very cornerstone. It is only by a close observation of the manifestations of disease that we can hope to obtain an insight into its real nature. In this work, the microscope is doing vast service, opening up new regions of observation and thought, and teaching us more and more of the close connection between pathology and physiology—a connection first fully recognised by Hunter. Through the revelations of the microscope, we are seeing, more and more clearly, that disease is not a thing foreign, or additional, to the body, so much as an evolution from it; in other words, that it does not consist in new processes, but rather in modifications of the old or natural processes; and, therefore, that the parasitic theory—the theory of the insertion, incubation, and proliferation of exogenous germs—is becoming less and less generally applicable. We learn that inflammation, and many other morbid processes, consist in a *plus* or *minus*, with slight variation, of the ordinary circulatory and nutritive processes. We are coming to more sure conclusions, through the researches of Virchow and others, that the pus-cell is but a variation of the areolar or epithelial cytoblast. Moreover, careful observation of the components of cysts and tumours, even of those most destructive in their effects, and, apparently, most foreign to the ordinary structures, brings out such close resemblance to the natural elements of the body, in their intimate composition and mode of growth, as to confirm the view, propounded some years ago, by myself\* and, probably, by others, that they are not new growths, or additions, but merely out-growths, or hypertrophies, with more or less modification, of the natural tissues; in short, that there are no new structures produced in the organism by disease. In the words of a recent writer, "heterologous tissues have physiological types; and there is no other kind of heterology in morbid structures than the abnormal manner in which they arise, as to place, time, and quantity."

If this be so, it almost follows that disease spreads, not by the propagation and dissemination of germs, but by impressing upon the nutritive processes in adjacent tissues, or in other parts of the body, of a tendency to like variation with its own; that is to say, by assimilation or fermentation, rather than by germination. Thus, inflammation spreads, like excitement

\* Lectures on Surgery, in the *Provincial Medical and Surgical Journal*, 1860 and 1861.



in a mob, by the extension of the disorder from cell to cell and from vessel to vessel; and suppuratation at one part may, especially in particular states of the system, induce suppuratation at other parts. Thus, cancer grows by moulding the adjacent growing elements into its likeness; while the cause which first gendered it, the constitutional predisposition, or whatever it may be, facilitates this influence over the surrounding area as well as over the immediate circumference of the disease. The communication of a disorder by inoculation is analogous to the effect produced by a ferment; and that by contagion resembles the influence exerted by a decomposing mass in a larder.

But I must not stray into these pleasant paths of theory. Not, as I have before said, that they are without their practical import; and I am sometimes tempted to think that the view of disease just taken does seem to shed a dim, distant glimmer of hope upon that black and desperate disease which is the most grievous curse of our species and the saddest opprobrium of our science, the great emblem, and may we not say also, a great agent, of evil. If CANCER, after all, be the result of a modification of the ordinary processes of nutrition, may we not indulge a hope that, when those processes and that modification are better understood, some mode of control may be found, some means discovered, of arresting the disorder and of restoring health. When helplessly watching the sinking frame racked with this horrible malady, one feels that the remotest prospect of finding a remedy, or even of clearing the way to that knowledge of the malady which may lead to a remedy, is stimulus enough to urge on the pathologist through years of patient work.

There is scarcely a single page in the book of pathology which has not received additions, or undergone revision, within my own knowledge; while some long and important chapters, such as those on FATTY DEGENERATION and BLOOD-CLOTING in the living vessels, with EMBOLISM and all the consequences resulting from them, are altogether new. The thinking over what has been done, like the gloating over the recollections of a feast to the glutton, makes us yearn for what is to come. And, perhaps, in no direction are my own yearnings so strong as in that of the desire to know something of, and to be able to do something in, TETANUS. I speak of acute traumatic tetanus; for in the chronic and idiopathic forms of the disorder, as we all know, the patient, if carefully tended and well fed, not unfrequently recovers. But never do I feel so utterly depressed, depressed with the double feeling that I can do nothing and that I ought to be able to do everything, as when that horrid grin tells that the malady has commenced and is proceeding quickly. Hoping against hope, after so many disappointments, I try what has been reported to do good in the hands of others, only to be again disappointed, and come to the conclusion that the prospect of recovery in any case depends upon the power of the patient to wear out the malady rather than upon anything that I can do to mitigate its force. What is it? and where is it? Is it in the blood? in the nerves? or in the muscles? Surely science will one day point out its dwelling and its nature, and help us to dislodge it.

Let me not forget thankfully to acknowledge that for the great progress in pathology and minute anatomy we are chiefly indebted to the persevering

labours of Germany, more particularly to the professors in the German universities, whose position, and simple habits, and moderate pecuniary ambitions, combine to induce a life-long devotion to such subjects. Among ourselves, pathology and other branches of our science are, as I have already said, more commonly cultivated with an eye to their practical application, and are early deserted for practical work. In it, therefore, we ought to excel; and my own observation, in most of the important French, German, and Dutch hospitals, makes me bold to think that we do so; that our patients are, on the whole, better and more carefully treated, with less of meddlesomeness and interference with Nature's ways, and with more consideration for the avoidance of pain and the promotion of their real comfort and welfare. The ingenuity and delicacy of manipulation of the French, together with their quickness of apprehension and good spirit, the painstaking and kindness of the Germans, and the quiet good sense of the Dutch, are worthy of all admiration; and, as belonging to their respective national characters, are peculiarly suited to the temperament of the patients they severally have to treat. Each nation contributes the produce of its own peculiar genius. To the enterprising spirit of America, we are indebted for the inestimable boon of anæsthesia; to the ingenuity of France, we owe the ÉCRASEUR of Chassaignac,\* and various instrumental improvements; from Germany, have come the OPHTHALMOSCOPE of Helmholtz, the LARYNGOSCOPE of Czermak, and great additions to every branch of pathology; while the persevering ability, the courage, and practical discernment of Britain, may lay claim to most of the great improvements which have recently been effected in the surgical treatment of disease.

Nor must I conclude without an allusion to a feature which promises much for the welfare of patients in all classes of society, and in our hospitals in particular: a return to one of the best elements of the days of chivalry, and an instance of the good offices which the Church Catholic has, in all ages and all her vicissitudes, tendered to the poor and the sick; a feature with which the name of Nightingale will be long and thankfully associated. Let me not be thought wanting in appreciation of our present NURSES. They have done much. Indeed, I do not think that they receive, at the hands of the public, the gratitude and consideration which they deserve, and which would encourage them to the still better performance of their arduous and self-denying duties; and I often wish that our great pourtrayer of human character, whose popularity and excellence rests, in no small degree, upon the sympathies which he enlists for the humble and the deserving, had made the *amende honorable* to these useful and hardworking, but, by him, severely represented, persons. Still, we can scarcely over-estimate the moral and physical

\* Perhaps the most really useful application of the *écraseur* is for the removal of polypus of the uterus. In that, I have found it peculiarly advantageous. A few weeks ago, I removed with it a fibrous polypus, larger than a child's head, with a thick neck, quite beyond the reach of the finger. The mass was extracted by means of mild wifery-forceps, after its neck was cut through with the *écraseur*. No bleeding or untoward symptoms followed; and the patient is quite well. I have repeatedly removed internal hæmorrhoids with the *écraseur*. In one case, in which I was present at the operation, severe hæmorrhage ensued; and it was necessary, next day, to insert needles, and encircle the bleeding surface with ligatures. The patient did well. In operations upon the tongue, and, occasionally, in the removal of tumours, I have found the instrument of great service.

benefit that may be anticipated from the devotion to such duties of a higher class, gifted with a better education, actuated by a nobler feeling, and well trained for their work; while, to many in that class, the work will afford, not merely a maintenance, but an occupation and a home. Already the system is beginning to bear good fruit; and some of the best appointed of our hospitals are evidence to its success, and give encouragement to its more general trial.

In this address, I have not attempted anything like a systematic review of all that has been done, even in my own experience. Such an essay, I had not the time nor the disposition to undertake; and the nature of these addresses is wisely left to the judgment and disposition of those to whom you entrust the honourable task of delivering them. I have merely touched upon some points, and upon those cursorily and imperfectly, my object being, chiefly, to impart my own thoughts and feelings upon them; and this must be my excuse if I have seemed desultory and egotistical. I would that I could make you an offering more worthy the occasion; for I know how to value, if I do not know how to improve, the opportunities which these annual meetings afford; and I know that the addresses delivered at them, in past years, have been a source of much interest and instruction to many hearers and readers. To myself, they have been more than that. The first spark of professional zeal, and the first real impulse to work, I owe to the perusal, nearly thirty years ago, of one of the earliest of these addresses, delivered by one of the first and most earnest members of this Association, the founder of the East Anglian Branch, one of the most incessantly energetic of men and one of the best of surgeons—I mean the late Mr. Crosse of Norwich. His strong desire that the Association should meet in Cambridge has at last been realised; and the pupil's feelings to the master forbid my allowing the event to pass away without this slight tribute to his memory.

I think, gentlemen, that the profession of the surgeon is one of peculiar difficulty and anxiety. The requisites, physical and mental, for real success in it are, perhaps, greater than in any other; and failures are more directly apparent, often more distinctly traceable to ourselves, more startling, more shocking, and, I suspect, more disturbing to our peace of mind. But the balances of human happiness are pretty evenly swung; and in the opposite scale, we are able to place the satisfaction resulting from a vast amount of suffering prevented, of functions preserved, and life prolonged. This might be enough; but we have also the still greater satisfaction of feeling that, forasmuch as the higher and better part of man—the psychical, or moral—is closely connected with and, to some extent, dependent upon the lower, or physical, and the perfection of the one has a near relation to the perfection of the other; so a good done to the body has a deeper and more enduring effect than may at first appear. Its influence passes beyond the corporeal, and extends into the regions of the spiritual. We are accustomed to speak of the moral advantages and opportunities attendant upon sickness and infirmity; and we do so rightly, for every condition has its opportunities; but I have no question that those attendant upon health and soundness of body are greater. A damaged body is a moral disadvantage. Reason tells us that it should be so; and experience tells us that, on the whole, it is so; that the

*mens sana*, using the phrase in its widest and best sense, is most to be found in *corpore sano*. Such a view sets the greatest value upon health, and holds in highest estimation the profession whose work it is to maintain and to restore health. It shows us that every disease cured and every limb saved is a blot removed from the face of Nature's noblest work, and is a help to man's march along the steep and rugged road to Heaven.

## British Medical Journal.

SATURDAY, AUGUST 13TH, 1864.

### THE CAMBRIDGE MEETING.

THE members of the British Medical Association have, for the thirty-second time, met in friendly conclave; and have again dispersed, thoroughly gratified with their reception, and refreshed by the intellectual and social communion which they have had the opportunity of enjoying. To say merely this, however, would be to say scarcely more than may be expressed of any meeting of the Association in any locality. The Cambridge meeting has been one of especial interest. For many years the Association has had before it, as a thing to be hoped for, a visit to that great seat of learning; and when, at the Bristol meeting last year, the proposal that the invitation from Cambridge should be accepted received the enthusiastic assent of all present, the expectations of a pleasant and profitable sojourn for a few days in that classic region were undiminished by the modest representation that Cambridge, at the time of the meeting, would not be seen at its best, while they must have been even increased by the assurance given that, notwithstanding all drawbacks, Cambridge would do its best. In any circumstances, a visit to Cambridge—with its University, its colleges, its libraries and museums, its associations with the names of great and good and learned men, and its picturesque scenery—would have been of high interest. And when to all these, the fixed and permanent attractions of the place, were added the hearty welcome, not only of the President and his professional fellow-townsmen, but of the University authorities, the ungrudging hospitality shown both to the Association as a body and to individual members by the colleges, and the opportunities afforded of gaining the acquaintance of men whose lives are passed in the cultivation of learning and of science—it cannot be but that the recent visit to Cambridge will long be remembered as one of the greatest events in the history of the Association.

And while we here record, in general but inadequate terms, the feelings of gratification and gratitude which, we are sure, every member who was present at the meeting must have felt, and while it



is impossible to enumerate by name all to whom obligations are due, we cannot let this opportunity pass without heartily thanking the local Committee, and especially their excellent Secretary, Dr. Latham, for their admirable arrangement of details, and for their endeavours to make the meeting such as we have described it to be. Few but those who have undertaken the task of local secretary to a general meeting of such an Association as ours, can understand the labour and anxiety which are therein involved; and this labour and anxiety are by no means diminished by such an *embarras de richesses* as exists in Cambridge. To arrange matters, in such circumstances, so that business and pleasure shall at once alternate and harmonise, and that the visitors shall be refreshed and instructed, not surfeited and perplexed, is no light task; but Dr. Latham has proved himself to be one of those capable of performing it. We are assuredly only expressing the feelings of all who attended the meetings, when we offer him cordial thanks for his labours, and congratulations on his success.

The interesting essay, also, of Dr. Humphry, on Cambridge, published lately in the JOURNAL, and liberally distributed in pamphlet form during the meeting, must also have not a little contributed to the instruction of members.

The details of the meeting are given in the pages which follow. A few points, however, may be here commented on.

The attendance of members was large. Our list of those present contains 215 names; but these were probably not all. The presence of so great a number—at least as many, indeed, as ordinarily form the list of those attending the meetings in towns with a large medical population—must have been due to the special attractions of Cambridge, and to their influence in causing an unusual influx of visitors from a distance. Those, in particular, who had been educated in the University, and had been admitted to its degrees and honours, came in considerable numbers; and many at least gave additional testimony of their respect for their *Alma Mater*, by wearing, while there, the academic dress which she had conferred on them.

The address of the President was fitting to the place and to the occasion, and full of sound sense. Cambridge, he acknowledged, had not done all that she might in encouraging the study of natural science; but she was becoming more and more alive to the importance of such study; and Dr. Paget showed that his efforts, at least, to promote further progress in this direction, would not be wanting. He advocated most ably the necessity of introducing into public instruction some one branch of natural science—not so much for the sake of the special knowledge itself, as of the training, in the way of distinguishing truth from falsehood, derivable from such study. He remarked—very correctly, in our opinion—that

the wonders of modern science themselves seemed to render the untrained mind more ready to receive the pseudo-wonders which impudence and charlatanry offer to it; and hence he derived an additional argument in favour of the course which he was advocating. We commend his remarks to our associates; and would especially ask them to consider well whether they cannot, in their respective localities, and by very simple means, follow out the plan sketched for them by Dr. Paget, and thereby do their share in the dispelling of ignorance and the prevention of its attendant evils.

The report of Council showed the state of the Association to be very satisfactory. Its members have reached 2,400; and a continuance of that steady progress, which has attended it for several years, may be reasonably expected. The Branches are reported to be prosperous, and fruitful of good. During the last year, two new Branches have been recognised, one of these being the first colonial branch. We trust it will be followed by others in the British dependencies. The financial report, made up to the end of 1863, is, from causes described, apparently less favourable than could be desired; but, although the present state of the Association finances was not alluded to, we believe we are correct in stating that the subscriptions for the present year are, on the whole, well paid up; that the amount of arrears is steadily diminishing; and that there is reason to expect a favourable account from the Treasurer at the end of the year.

Of political and social matters, several of much interest came under notice.

The Council Report referred to the failure of the attempt made last year to induce the College of Surgeons to provide for its country Fellows the means of voting by proxy, and recommended a renewal of the efforts made.

The army medical question also, as was to be expected, received attention both from the Council and from the meeting. The defence of the Director-General, attempted by Dr. Wood, appeared only to strengthen the hands of those who sought to ameliorate the condition of the army medical officer; and the able report on the subject, brought up on Thursday by Dr. Falconer, with the consequent resolution proposed by Dr. Stewart, received the unanimous assent of the meeting: the sanction and approval of the Association being thus, in effect, given to the proceedings recently taken by the Metropolitan Counties and other Branches.

Two events occurred which, in whatever locality the meeting might have been held, must give it a prominent place in the history of the Association.

Last year, the Association assented to a proposal made by Dr. Richardson, for the appointment of a committee to consider the possibility of establishing a Provident Fund. At Cambridge, a report, drawn up after most careful consideration, and founded on

the advice of Mr. Tidd Pratt, whose intimate connection with friendly societies gives his opinions much weight, was brought up and approved; so that the formation of a fund, for affording relief to members during disability from sickness or accident, becomes henceforth an integral part of the Association. That such a fund is demanded, there is unfortunately too much evidence; and, if the project brought forward be successfully carried out—and we see no reason why it should not—the institution of the Medical Provident Fund will be an act on which the Association, and especially Dr. Richardson, will be able to look back with unmingled satisfaction. Of the objects and details of the scheme, we shall probably have more to say hereafter. In the mean time—*Floreat!*

The gold medal—bearing most appropriately the name of the respected founder of the Association—was this year presented for the first time; the successful candidate being Dr. Thudichum—a man known, by repute at least, to the majority of our readers for his high scientific attainments, and whose character commands respect. We congratulate him most sincerely on being the first recipient of the Hastings medal; especially because the results of competition in previous years have shown that it is a prize which is not to be lightly bestowed, and because of the authority given to the award by the well known scientific character and honesty of the three adjudicators—Drs. Sharpey, Richardson, and Waters. The essay of Dr. Thudichum will be published in the JOURNAL, in accordance with the terms on which the prize was offered.

With these remarks, we close our comments on this most pleasant and successful meeting of the Association, of which it may truly be said—

“Hæc olim meminisse juvabit.”

#### THE “LANCET” AND DR. HUMPHRY’S ADDRESS.

As our readers are well aware, the *Lancet* has more than once attempted to obtain possession of the addresses and papers read at the Annual Meeting of the British Medical Association. It has hitherto been foiled in its efforts; but this year, through a breach of faith on the part of one of its agents or reporters, it has been successful in obtaining the MS. of Dr. Humphry’s address, and in printing and publishing it before it was delivered. Dr. Humphry, who was evidently quite unaware of the previous proceedings of the *Lancet* in this way, on being requested, delivered his MS. into the hands of an accredited agent of the *Lancet*. Dr. Humphry, at the same time, distinctly informed the agent that the address was not to appear in the *Lancet* of the 6th inst., unless it was also published in the JOURNAL of that day. On finding that the address would not be published until the 13th, Dr. Humphry immediately informed

the reporter that the address must not appear in the *Lancet* of the 6th, and that he must at once return the MS. Nevertheless, to Dr. Humphry’s great surprise and regret, the address appeared in the *Lancet* of August 6th. We give this explanation, as some of our readers may otherwise be surprised that the address of Dr. Humphry was not published in our last number. The weekly journals go to press on Thursday evening, and appear in London on Friday morning. Consequently, to have published Dr. Humphry’s address in the last number of the JOURNAL would have been to publish it many hours before it was delivered! We apprehend that few of the members of the Association would have thought it very complimentary if they were asked to listen to an address which they might have read hours before in a journal! Every member of the Association at Cambridge might in this way have read in the pages of the *Lancet* Dr. Humphry’s address long before he delivered it.

Whether the *Lancet* is or is not proud of what we must call this very smart transaction, we cannot tell. The *Lancet* knows right well that the British Medical Association regards as its own, for printing, just as all other large Associations do, the papers read at its meetings. The *Lancet* also knows that this is the intention of the Council of the Association. The *Lancet* also knows that, unless in some kind of underhand way, the papers and addresses cannot be obtained from their authors by the *Lancet*. But, knowing all this, it does not scruple to take advantage of a breach of faith on the part of one of its agents, and to print Dr. Humphry’s address, the agent having been informed that it would not appear in the JOURNAL of the 6th. On a former occasion, when the same attempt to obtain illicit possession of our papers was made, the *Lancet* attempted to hide its retreat by talking buncombe, and accusing us of illiberality. We will, therefore, anticipate any such excuse by saying, that proof-sheets of all the addresses are at the service of the *Lancet* and other journals, so that they may be published on the same day as they appear in the BRITISH MEDICAL JOURNAL. We are ready to supply the *Lancet*, as we last week supplied the *Medical Times and Gazette*; but having a clear and undoubted priority of claim for printing all the papers and addresses read at our meetings, we shall certainly not allow the *Lancet* to repeat again, with success at least, its attempts in this wise.

We could have hoped that the ordinary courtesy and the professional propriety which distinguish the intercourse of medical men might have existed in the relations between members of the medical press; but we regret to find that the *Lancet* will not have it so, and that it is, in truth, still determined before everything to vindicate its claim to the character of a commercial undertaking.



## THIRTY-SECOND ANNUAL MEETING

OF THE

## British Medical Association.

*Held in Cambridge, 3rd, 4th, and 5th August, 1864.*

## WEDNESDAY.

THE Committee of Council met at Twelve noon; and the General Council at half-past Two P.M.

At Four o'clock P.M., the first General Meeting of Members took place in the Senate House of the University. The attendance was large.

The following are the names of the members and visitors who, as far as we have been able to ascertain, were present at the meeting.

Acland, H. W., M.D., F.R.S., Oxford  
Aikin, C. A., Esq., London  
Alford, S. S., Esq., London  
Anstie, T. B., Esq., Devizes  
Armstrong, J., M.D., Gravesend  
Baker, J. Wright, Esq., Derby  
Balding, D. B., Esq., Royston  
Ballard, Thomas, M.D., London  
Barclay, A. W., M.D., London  
Barham, C. M., Truro  
Barry, J. Milner, M.D., Tunbridge Wells

Bartlett, E., Esq., Camplen  
Bartlett, Wm., Esq., London  
Beattie, J., M.D., Clifton  
Bevel, W. C., M.D., Hanwell  
Bell, the Rev. D., M.D., Gouda  
Bottomley, George, Esq., Croydon  
Boycott, Thos., M.D., Canterbury  
Branson, F. M.D., Haslow  
Bridge, John, Esq., Cottenham  
Buchanan, George, M.D., Glasgow  
Budd, Wm., M.D., Clifton  
Burrows, G., M.D., F.R.S., London  
Cadge, W., Esq., Norwich  
Camps, W., M.D., London  
Carter, James, Esq., Cambridge  
Cervy, Robert, Esq., Aylesbury  
Child, G. W., M.D., Oxford  
Church, W. J., Esq., Bath  
Clark, Andrew, M.D., London  
Clover, J. T., Esq., London  
Cooper, George, Esq., Brentford  
Cormack, J. R., M.D., London  
Cribb, H., Esq., Bishop's Stortford  
Crosse, T. W., Esq., Norwich  
Curling, T. B., Esq., F.R.S., London  
Dalton, P. H., Esq., London  
Daniell, Edward, Esq., Newport Pagnell

Davey, J. G., M.D., Northwoods  
Dav, W. E., Esq., Bristol  
Day, W. H., M.D., Newmarket  
Death, R., Esq., Buckingham  
Deighton, J., Esq., Cambridge  
Dick, Henry, M.D., London  
Dickson, J. T., Esq., Cambridge  
Drozier, W. H., M.D., Cambridge  
Durrant, C. M., M.D., Ipswich  
Eddie, W. H., Esq., Barton-on-Humber

Erichsen, John E., Esq., London  
Evans, J. J., Esq., St. Neots  
Evanon, R. T., M.D., Tonquay  
Ewen, Henry, Esq., Long Sutton  
Faircloth, R., Esq., Newmarket  
Falconer, R. W., M.D., Bath  
Fayrer, George, M.D., Henley-in-Arden

Firth, G. W., Esq., Norwich  
Firth, John, Esq., Nettlefield  
Fisher, W. W., M.D., Cambridge  
Flint, R., Esq., Stockport  
Frost, J., Esq., Hampstead  
Foster, B. W., L.R.C.P., Birmingham  
Foster, M., Esq., Huntingdon  
Fowler, R. S., Esq., Bath  
Freeman, S., Esq., Stowmarket

Gaunt, J. S., Esq., Alvechurch  
Gibb, G. D., M.D., London  
Gibson, S. M., London  
Gillbraud, W., Esq., Blackburn  
Girling, G. L., Esq., St. Ives  
Goodale, E., M.D., Clifton  
Goodwin, J. W., M.D., Bury St. Edmunds  
Gould, H. M., Esq., Waterbury  
Gourlay, F., M.D., Weston-super-Mare

Graham, A. R., M.D., Cosgrove  
Grant, A., Esq., London  
Green, Thomas, M.D., Cambridge  
Hadley, J. J., Esq., Birmingham  
Hall, C. R., M.D., Torquay  
Hall, F. R., Esq., Cambridge  
Hammond, J., Esq., Cambridge  
Hardy, H. G., Esq., Byers Green, Durham

Harris, F. H., Esq., Mildenhall  
Hart, Ernest, Esq., London  
Hastings, Sir C., M.D., Worcester  
Hatton, John, M.D., Belvedere  
Haviland, H. J., M.D., Cambridge  
Hawkins, Charles, Esq., London  
Hemming, J. H., Esq., Kimbolton  
Henry, A., M.D., London  
Hewitt, Graily, M.D., London  
Hey, Samuel, Esq., Leeds  
Higginbottom, John, Esq., F.R.S., Nottingham

Hillier, Thomas, M.D., London  
Hodson, C. P., Esq., Bishop's Stortford  
Hornby, T., Esq., Pocklington  
Hough, J., Esq., Cambridge  
Humphry, G. M., M.D., F.R.S., Cambridge

Hutchinson, J., Esq., London  
Jeaffreson, S. J., F.R.C.P., Leamington  
Jenkins, J., Esq., Bassingbourn  
Jones, George, Esq., Birmingham  
Jones, T. S., Esq., Ely  
Kingdon, J. A., Esq., London  
Kirkman, J., M.D., Melton, Woodbridge

Kite, W. J., Esq., West Bromwich  
Lanckester, E., M.D., F.R.S., London  
Latham, P. W., M.D., Cambridge  
Laycock, T., M.D., Edinburgh  
Lord, C. F. J., Esq., London

Lund, Edward, Esq., Manchester  
Macintyre, P., M.D., Liverpool  
MacKenzie, M., M.D., London  
Mackie, James, Esq., Heighington, Darlington

McNab, D. K., Esq., Epping  
Manley, John, Esq., West Bromwich

Markham, W. O., M.D., London  
Marshall, Henry, M.D., Clifton  
Martin, A. R., Esq., Rochester  
Martin, Robert, M.D., London  
Martin, W., Esq., Hammersmith  
Martyr, Samuel, M.D., Clifton  
Mead, G. B., M.D., Newmarket

Mellor, T., Esq., Manchester  
Nerriman, S. W. J., M.D., London  
Moore, C., Esq., London  
Moore, George, M.D., Hastings  
Moore, W. D., M.D., Dublin  
Muriel, J., Esq., Ely  
Nalty, J., M.D., Dublin  
Newham, J., Esq., Doddington  
Newton, Lancelot, Esq., Alconbury Hill

O'Connor, Thomas, Esq., March  
Ogle, Wm., M.D., Derby  
Ormerod, E. L., M.D., Brighton  
Paget, G. E., M.D., Cambridge  
Paget, James, Esq., F.R.S., London  
Paul, J. H., M.D., Camberwell  
Pemberton, O., Esq., Birmingham  
Perry, Marten, M.D., Evesham  
Phillipson, G. H., M.D., Newcastle-upon-Tyne

Pinchard, B., M.D., Cottenham  
Pitt, J. B., M.D., Norwich  
Porter, W. G., Esq., Peterborough  
Propert, John, Esq., London  
Pyne, R., Esq., Royston  
Radcliffe, C. R., M.D., London  
Ramsey, W. F., M.D., London  
Raynes, Henry, Esq., Pottton  
Rhodes, James, Esq., Glossop

Richardson, B. W., M.D., London  
Roberts, O., M.D., St. Asaph  
Roberts, W., M.D., Manchester  
Routh, C. H. F., M.D., London  
Sankey, Wm., Esq., Dover  
Sauson, A. E., Esq., London  
Seaton, Joseph, M.D., Sunbury  
Semple, R. H., M.D., London  
Shipman, R., Esq., Grantham  
Sibson, F., M.D., F.R.S., London

Simpson, Henry, M.D., Lymington  
Skinner, T., M.D., Liverpool  
Smith, E., M.D., F.R.S., London  
Smith, F. M., M.D., Great Hadham  
Smith, T., M.D., Cheltenham

Smith, T. Heckstall, Esq., St. Mary Cray  
Solly, S., Esq., F.R.S., London  
Solomon, J. V., Esq., Birmingham  
Southam, G., Esq., Manchester  
Spence, James, Esq., Pimburgh  
Squire, Balmanno, M.B., London  
Stear, H., Esq., Saffron Walden

Steele, H. C. B., Esq., Stoke Ferry  
Stewart, A. P., M.D., London  
Stewart, W., M.D., Diss  
Stocks, George, Esq., Blackburn  
Stookes, A., M.D., Liverpool  
Symonds, J. A., M.D., Clifton  
Teale, T. P., Esq., Leeds  
Terry, H., jun., Esq., Northampton  
Thorp, D. L., M.D., Cheltenham  
Thudichum, J. L. W., M.D., London

Trousdale, W. M., Esq., West Bromwich  
Tuke, T. H., M.D., London  
Tunstall, James, M.D., Bath  
Turner, Thos., Esq., Manchester  
Veney, H., Esq., Woburn  
Vose, James, M.D., Liverpool  
Wales, J., Esq., Downham Market  
Wales, T. G., jun., Esq., Downham Market

Walker, J. W., M.B., Spilsby  
Walker, Thomas J., M.D., Peterborough  
Wallis, George, Esq., Cambridge  
Walton, Haynes, Esq., London  
Ward, William, M.D., Huntingdon  
Waters, A. T. H., M.D., Liverpool  
Waters, Edward, M.D., Chester  
Watson, J., Esq., Hemmingsford Grey

Webster, J. H., M.D., Northampton  
Welsh, F., Esq., Saffron Walden  
Wells, T. Spencer, Esq., London  
Westall, E., M.D., Caterham  
Whitely, G. B., M.D., Cannes  
Whitfield, Henry, Esq., Ashford  
Whitton, C., M.D., Stony Stratford

Wilkinson, W. C., Esq., Spalding  
Williams, E., M.D., Wrexham  
Williams, Joseph, M.D., London  
Williams, T. Watkin, Esq., Birmingham  
Witten, E. W., Esq., London  
Wokes, Edward, M.D., Luton  
Wood, William, M.D., London  
Woodhouse, R. T., M.D., Reading  
Wright, Henry, Esq., March  
Wyman, George, Esq., Alcester  
Wyman, H. S., Esq., Hatfield  
Broad Oak

## ADDRESS OF THE RETIRING PRESIDENT.

Dr. SYMONDS (who, on taking the chair, was warmly cheered) said that it was his duty and his pleasure to make a few valedictory observations, and he would promise that they should be but few. To say much, would be to encroach upon the attention of the meeting, and upon the time all but exclusively due to his successor; but were he to say nothing, he should be wanting in respect to the Association, and be acting in violation of those feelings of gratitude which were called forth by the pleasure he had experienced in filling the office of President of their Association. [Cheers.] He met the members last year at Clifton with mingled feelings—with a feeling of pleasure, but, also, with a feeling of anxiety as to the success of the proceedings, so far as they might be affected by his direction; though he admitted that this latter feeling had been displaced by their assistance and indulgence. Now, however, his feelings were unmingled. He had the pleasure of meeting here old friends and new; and of congratulating them on being assembled under the protection and countenance of that mother of learning, the most august and time-honoured University of Cambridge. [Cheers.] But if there were nothing in the *genius loci*, they would always expect a prosperous meeting under the presidency of the able physician who was about to preside over them. [Applause.] Under his able guidance, this meeting would be worthy of the high character of the Association, and deserving of the encouragement of the place in which they were met. There was much ground for gratification and for profit in the programme; but there was one point in particular, which he would notice, because it was

one of great importance; and that was, that there would be brought before the meeting a plan for the formation of a Provident Society in connection with the Association. As he (Dr. Symonds) could not be present at the discussion of the plan, he did not like to let the opportunity pass without saying how warm an interest he took in the scheme. He thought such a society highly calculated to give support and comfort to many suffering members; and, also, to give them heart and encouragement in the midst of work, relieving them of that consuming care which was so very detrimental to them. If this meeting at Cambridge, prosperous and brilliant as it would be, should succeed in establishing such a society, he could not but think that it would confer an inestimable boon on the profession, and augment much the influence of this Association; and if in this matter only it was successful, the meeting at Cambridge would deserve to be held in everlasting remembrance. [Cheers.] He should ever remember with pride the honour he had derived from holding his office; and he should never forget the kindness, co-operation, and cordial support, which he had received from the founder and from every member of the Association with whom he had been brought into contact. He fervently wished them all augmented prosperity; and he was sure their own hearts would echo the wish that that prosperity might be evidenced, not only in their happiness, but also in their usefulness. "The old year", added Dr. Symonds, "is gone, the new one is come."

"There's a new foot on the floor, my friends,  
There's a new face at the door, my friends,  
There's a new face at the door."

"We shall all rejoice to let him in, and give him a hearty welcome." [Cheers.]

Dr. PAGET, the new President, then assumed the presidency, amid loud cheering; and proceeded to read his inaugural address, which was published at page 141 of last week's JOURNAL.

#### VOTE OF THANKS TO DR. SYMONDS.

Dr. HUMPHRY (Cambridge) said an important task had devolved upon him, but one which he had accepted willingly, because he felt assured that the resolution he was about to propose would be most cheerfully adopted. There were certain persons and certain events which made a life-long impression; and he was sure the members would agree with him that one of those persons was their late President; and one of those events, that generous courtesy and that elegant and liberal hospitality which they had received from him. [Cheers.] No advantage they derived from these meetings was greater than that of the acquaintances they there formed. At Bristol, he had made the personal acquaintance of Dr. Symonds, and in him he had realised his *beau idéal* of what a physician ought to be, though that ideal was no low one. He had found Dr. Symonds a kind, courteous, noble-hearted, learned man. Now the mantle was fallen from him, and it had fallen upon most worthy shoulders. He proposed—

"That the cordial thanks of this meeting be given to Dr. Symonds, the retiring President; and that he be appointed a Vice-President." [Cheers.]

Dr. FALCONER (Bath) briefly seconded the motion; which was carried by acclamation.

Dr. SYMONDS said he thought he had already said his last word; but their kindness called from him one more last word, and that was, his expression of profound gratitude for their kindness and cordiality in passing the resolution which had been so eloquently and flatteringly proposed by Dr. Humphry. His year of office had been a pride to him; and that was most agreeably consummated in receiving the thanks of this great Association in that noble Hall of the University of Cambridge, and in his having those

thanks offered to him by one of the brightest ornaments of the University. [Applause.]

#### REPORT OF COUNCIL.

Mr. WATKIN WILLIAMS, General Secretary, read the following Report.

"Your Council has sincere pleasure in meeting the members of the British Medical Association in Cambridge.

"This is the first meeting the Association has held in this renowned seat of learning.

"Your Council has reasons to expect that this, the thirty-second anniversary, will be as brilliant and as successful as any of its predecessors.

"The Committee of Council elected at Bristol has held its quarterly meetings in Birmingham; each time under the presidency of Sir Charles Hastings.

"The members of the Committee desire very gratefully to acknowledge the great service rendered to the Association by Sir Charles during the past, as in former years.

"Branches. Since the last annual meeting, two new Branches have been recognised by the Committee of Council; viz., the Hull Branch and the Bengal Branch.

"Your Council would very earnestly urge upon the members of the Association the desirableness of forming new Branches in those parts of the country in which the present Branches are not easily accessible to the members of the Association. This will be found to be the most effectual means of increasing the number of members.

"Number of Members. The total number of members on the books on the 31st of December, 1863, was 2156; since then there have been added 266. The total number on the books at this time is 2422.

"The late Mr. Peter Martin. Since the last annual meeting, twenty-seven members have died. Among them occurs the name of Mr. Peter Martin of Reigate. Your Council cannot allow this event to pass without bearing its tribute of regard to the memory of so good a man. Mr. Martin had been a member of the Association for very many years, and succeeded his father as Honorary Secretary of the South-Eastern Branch of your Association. By his zeal, energy, and great devotion to the cause, he succeeded in making his Branch one of the most efficient in the Association. In the manner in which he performed all he undertook, he was truly a model which the best of us might well aspire to imitate.

"The Branch Secretaries. Your Council desires to bear grateful testimony to the able manner in which the Honorary Secretaries of the different Branches have performed their duties during the past year. The continued success of the Association is mainly due to the unceasing labours of these gentlemen.

"The JOURNAL. Your Council has much pleasure in acknowledging the continued ability with which the JOURNAL has been conducted during the past year.

"Finance. The following is the Financial Report for the year 1863, published in the JOURNAL in accordance with Law XXIX, the accounts having been audited by Dr. Melson and Mr. Hadley, the auditors appointed at the annual meeting.

"Financial Statement for 1863. Your Committee regret that the financial statement on the present occasion is not so satisfactory as that which was made last year to the Association.

"Instead of a balance of £221:1:10½ being due from the Treasurer to the Association, the balance-sheet now submitted, and found correct by the Auditors, shews a balance of £8:3:0½ due to the Treasurer.

"This excess of expenditure over income is mainly due to the issue of an extra number of the JOURNAL,



involving a cost of £134:10. The salaries, also, for the last year amount to a higher sum than for the previous year.

"As these causes of increased expenditure are not likely to operate in the current year, your Committee have reason to believe that at the end of 1864 the income will be found equal to the expenditure.

#### "1864.—RECEIPTS.

|  |       |    |     |
|--|-------|----|-----|
| Balance from 1862 .....                  | 221   | 1  | 10½ |
| Subscriptions .....                      | 2118  | 9  | 0   |
| Donation by Dr. Evans (Gloucester) ..... | 10    | 10 | 0   |
| Advertisements .....                     | 626   | 16 | 4   |
| Balance .....                            | 2956  | 17 | 24  |
|  | 8     | 3  | 0½  |
|  | £2955 | 0  | 3   |

#### "1863.—PAYMENTS.

|   | £    | s. | d.  |
|---|------|----|-----|
| JOURNAL EXPENSES:   |      |    |     |
| Mr. Richards (Printing) .....   | 178  | 4  | 9 0 |
| Ditto (for Extra Number) .....  | 134  | 10 | 0   |
| Mr. Richards (for Directing, etc.) .....                              | 66   | 16 | 0   |
| Mr. Honeyman (Sundries) .....   | 92   | 18 | 0   |
| Mr. Davidson (Commission) .....                                       | 77   | 19 | 0   |
| Mr. Orin Smith (Editorial) .....                                      | 5    | 3  | 6   |
| Editor of Journal .....   | 200  | 0  | 0   |
| Dr. Henry .....   | 50   | 0  | 0   |
| Contributions .....   | 361  | 8  | 0   |
| Interest and Commission .....   | 3    | 16 | 4   |
| EXECUTIVE EXPENSES:   |      |    |     |
| Dr. Williams and Clerk .....  | 117  | 0  | 0   |
| Dr. Williams .....  | 52   | 10 | 0   |
| Dr. Williams (Petty Cash) .....                                       | 49   | 9  | 8   |
| Mr. Williams (ditto) .....  | 8    | 5  | 11  |
| Bristol Reporter .....  | 11   | 14 | 6   |
| Birmingham Stationer .....  | 10   | 9  | 6   |
| Sundries:—District Expenses; Post-Office Orders; and Collecting ..... | 18   | 10 | 10  |
|   | 2985 | 0  | 3   |

"The Royal College of Surgeons. In accordance with a resolution passed at Bristol, a memorial, signed by the President and Secretary of the Association, was presented to the Council of the Royal College of Surgeons, requesting them to alter their bye-laws, or take such other necessary steps as may enable those Fellows of the College residing in the provinces to vote by proxy papers in the election of members of the Council. The following is a copy of the memorial, with the reply received by the Secretary.

"Memorial. 'To the President, Vice-Presidents, and Members of Council of the Royal College of Surgeons of England.

"The Memorial of the President and Members of the British Medical Association sheweth,

"That the British Medical Association numbers more than two thousand medical practitioners in the metropolis and the provinces, including many Fellows and Members of the Royal College of Surgeons.

"That the mode of election of the Members of Council of the College of Surgeons has been brought under the notice of your memorialists.

"That your memorialists understand it to have been the intention of the Charters granted to the College, that the opportunity of voting in the election of Members of the Council of the College should be afforded equally to all its Fellows.

"That, under the present bye-laws of the College, personal attendance on the day of election is required; whereby many Fellows residing in the country, and prevented by their professional duties from going to London, are prevented from recording their votes, although desirous and justly entitled to do so.

"That, in the Universities of Oxford and Cambridge, the voting at the election of members of Parliament is conducted by means of voting-papers, filled up by non-resident electors, and sent by post; proper provision being made for their authenticity.

"That your memorialists are of opinion that the

adoption of some such method would remove the dissatisfaction at present felt by the profession as to the mode of election of Councillors for the Royal College of Surgeons, and would entitle the result of the election to be considered a more correct expression of the wishes of the Fellows than it now is.

"Your memorialists, therefore, earnestly request that you will be pleased to take into consideration the propriety of altering the bye-laws of the Royal College of Surgeons of England in regard to the election of members of Council, or, if necessary, of obtaining the legal powers for doing so, so that non-resident Fellows of the College may be enabled to vote by proxy at the annual election of members of Council, in accordance with the principle which has already been advantageously adopted in the Universities of Oxford and Cambridge.

"Signed,

"J. A. SYMONDS, M.D., etc., President.

"T. WATKIN WILLIAMS, M.R.C.S. Eng.,  
General Secretary.

"Reply. 'Royal College of Surgeons of England, London, 24th day of November, 1863.

"SIR,—I have laid before the Council of this College your letter of the 23rd ultimo, addressed to the President of the College, together with its inclosure, a memorial from the President and Members of the British Medical Association, requesting the Council of the College to take into consideration the propriety of altering its bye-laws in regard to the election of Members of Council, or, if necessary, of obtaining the legal power of doing so, so that non-resident Fellows of the College may be enabled to vote by proxy at the annual election of Members of Council.

"And I am desired, in reply to your communication, to transmit to you the inclosed copy of the 15th Section of the Charter of the 7th of Victoria, from which it will be perceived that the voting at elections of Members of the Council by the Fellows in person is not regulated by bye-laws, but is a provision of the Charter by which the fellowship of this College was instituted.

"I am also desired to inform you that, although every consideration has been given to the wishes of so large a number of the profession as the members of the Provincial Medical Association, it is not thought expedient, by applying for a new or supplementary Charter, to endeavour to effect the object to which their memorial relates.

"I am, sir, your obedient servant,

"EDM. BALFOUR, Secretary.

"T. Watkin Williams, Esq.,

"Secretary to the British Medical Association."

"Copy. 'Section 15. Charter 7th Victoria. That the Members of the Council of the College shall hereafter be elected by the Fellows of the said College, including the Members of the Council as such; and such Fellows, whether Members of the Council or not, shall be allowed to vote in person only, and not by proxy; and that any number of Fellows (not being less than fifteen) present at a meeting convened for the purpose of electing a Member or Members of Council shall be competent to proceed to such election.

"EDM. BALFOUR, Secretary."

"Your Council recommend that a memorial be again presented to the Council of the College on the same subject, and that the Committee of Council be empowered to take any other steps they may deem requisite to obtain the alteration; feeling quite assured that so just a request must in time be conceded.

"The Army Medical Service. A memorial was also presented by your Association to the Secretary for War, and to the First Lord of the Admiralty, respecting the grievances of the medical officers of the

army and navy. Your Council regrets that no improvement has yet taken place; but your Council feels quite confident that the authorities at the Horse Guards and the Admiralty will, at no distant period, be induced to do justice to a class of officers not second even to the combatant officers in importance to the well-being and efficiency of the united service. The medical officers have done their duty nobly, both by sea and land. Unquestionably, the profession has the remedy in its own hands, if the members thereof will but be faithful and true.

"Under these circumstances, it seems to the Council highly desirable that the Association should urge upon the Commander-in-Chief, the Secretary for War, and the Secretary for India, the necessity of making such concessions as will place the medical branch of the service in a more satisfactory position; but that they should especially take steps to have the matter brought prominently before and discussed by both Houses of Parliament.

"*Poor-law Medical Reform.* Mr. Griffin and his fellow-workers continue their praiseworthy efforts to improve the condition of the Poor-law medical officers; they have succeeded in obtaining the supply by the guardians of some of the more costly medicines.

"*Benevolent Fund.* This most valuable institution continues its work of mercy; and your Council begs very earnestly to recommend it to the support of the members of the Association, as well as to that of the public at large. A report will be read by the Treasurer of the Fund.

"*Medical Provident Fund.* A report will be read from the Committee appointed at Bristol to inquire into the formation of a Medical Provident Fund.

"*The Hastings Prize Medal.* The adjudicators of this prize have forwarded the following report.

"*To Sir Charles Hastings, M.D., D.C.L., President of the Council of the British Medical Association.*

"Dear Sir Charles,—We, the undersigned, being the Committee appointed by the Committee of Council to adjudicate the Hastings Gold Medal for 1864 for an Essay on Physiology, beg leave to state that, of six essays sent in in competition, an Essay on Urochrome, bearing the motto 'Original Research', is the one most worthy of the prize.

"We therefore inclose to you the letter accompanying the MS., containing the name of the author, with the seal unbroken; and we will ask you to be kind enough to break the seal, and to communicate the award to the President, Dr. Symonds. We will further ask you—in order that he may be present at Cambridge on Thursday next to receive the medal—to inform the author himself of his success, and to express to him our congratulations on the result of his learned and successful effort.

"We remain, dear Sir Charles, yours faithfully,

"W. SHARPEY, M.D.

B. W. RICHARDSON, M.D.

A. T. H. WATERS, M.D.

"London, 29th July, 1864."

"The President of the Council having broken the seal and examined the inclosure, in accordance with the wish of the adjudicators, your Council has the pleasure to announce that Dr. Thudichum is the successful candidate.

"The medal will be presented to-morrow morning.

"*The Address in Medicine* will be delivered by Dr. Ormerod.

"*The Address in Surgery* will be delivered by Dr. Humphry, F.R.S.

"*Alterations of Laws.* Dr. Styrap has given notice of the following alteration of Law xv; viz., after the words 'one guinea annually' shall be inserted, 'provided that such sum be paid not later than June 30th,

after which date each member shall, in default, pay £1:5.'

"Mr. Watkin Williams has given notice to alter Law xv, by inserting 'the 1st of December,' instead of '25th of December.'

Mr. LORD (Hampstead) moved—

"That the Report now read be received and adopted."

He considered the Report a very satisfactory one.

Mr. FLINT (Stockport) seconded the motion.

Dr. GIBBON (London) said, with regard to the Poor-Law Officers' Superannuation Bill, that it was inapplicable to the medical officers in the various unions, inasmuch as those who were benefited by it were to have given their whole time exclusively to the service of the guardians. But there was one great evil, upon which the report did not touch at all—that of gratuitous medical services. The guardians said to themselves, and other public bodies said to themselves—"The hospital medical men do their work for nothing, why should not our medical officers do their work for nothing?" It would come to this eventually, that both in the unions and in the army and navy, gratuitous medical services would be in vogue; and he felt called upon to say that these gratuitous services were literally eating up the profession, and ought to be put down. Hospitals were continually being established ostensibly for the relief of the poor, but in reality were used by persons for whom such institutions were never intended. Dr. Gibbon instanced a case in London, where a firm, employing a large number of men peculiarly liable to accidents, paid £300 a-year to a surgeon to attend their men. The manager, a shrewd Scotchman, subscribed £10 a-year to a new hospital, and discharged the medical man, sending all their cases there, and boasted to Dr. Gibbon of the saving thus effected.

Dr. STEWART (London) said there was another subject of great importance in respect to which he thought it would be well for this Association to take some steps. He alluded to the question of medical services in the army, in which he had himself taken some interest. He thought the recommendation given in the report of the Council on this subject would prove itself to all present to be very timely, especially when they remembered the scenes in the last session of Parliament and the narrow escape they had had from a great injustice in the passing of Sir Charles Wood's Bill bearing on Medical Services in India. He thought that a committee should be appointed to report to a future meeting as to the course to be taken with respect to army medical officers.

Dr. WOOD (London) said that, with respect to the Army Medical Service he, like Dr. Stewart, had taken great interest in the subject. He had found great exaggeration prevalent as to the evils attendant on medical service in the army. That there were grievances he did not deny; but these grievances had been very much exaggerated. A statement had been made as to there being two hundred vacancies, and from the manner in which he heard the assertion repeated, he began to believe that there was some truth in it; but he had been present at one of the depositions which had waited on the authorities on the subject, and he had been told that instead of two hundred vacancies in the service there was only eighteen, and this in consequence of a change which had taken place in the Indian army. Justice had not quite been done to the Director-General, who had explained certain things which had not been noticed, and who had promised other things which had been done, but which also had not been noticed. One of the grievances complained of was the degradation of branding soldiers; and the Director-General had said that, as far as lay in his power, the grievance should be attended to; and an



order for its removal, if it were not actually in print, had passed the authorities. This instance, he thought, shewed the disposition of the authorities to meet the real grievances of the army medical officers. It was alleged that the position of these officers was inferior to that of the military officers. So far from this being the case they were, from the first to the last, in a better position. The assistant-surgeon took better pay than the lieutenant; he had the rank of captain, and six years service gave him the rank of major, and afterwards he had the probability of becoming equal in rank to lieutenant-colonel. The grievances, he repeated, were not so bad as had been stated. The great complaint, so far as he could understand it, was that medical officers were not allowed to take the chair in certain committees of inquiry; and this it was alleged was a gross breach of faith, and hard words had been used. A warrant was passed in 1858, which gave the medical officers a position they never had before; and when it was found that this warrant did not work well, a slight modification was made which constituted the grievance now complained of. Now if there had been any breach of faith, it certainly must be borne in mind that it could only be made applicable to those who had entered the army before the warrant was issued.

Dr. STEWART: This new regulation of the Horse Guards was not made public at all.

Dr. WOOD: These regulations, it might fairly be supposed, if not known to civilians, were known to the parties interested. He thought that every man, if he deemed it expedient, was at liberty to make any change in his household. If he kept many servants, he was quite at liberty to make what alteration he liked regarding them; and this being so, the military authorities could not be held chargeable with committing a breach of faith. As to the alteration made with respect to the courts of inquiry, he was not going to defend the course adopted by the authorities; but this he must say, that the Association was doing vast injury to the medical service in the army in misstating things, and in taking upon itself to dictate to the "powers that be," they injured both themselves and their medical brethren in the army.

Dr. SIBSON (London): The report of the deputation to the Director-General stated that he (the Director-General) was not in office when the alteration in the warrant was made.

Dr. WOOD: Dr. Sibson would admit that credit was not given the Director-General for the disposition he had evinced to do all he could do, and for his wish to see done that which he himself could not do.

Dr. RICHARDSON strongly pressed the meeting not to shirk the point at issue. There were great grievances to be redressed.

Dr. WOOD admitted there were great grievances, but objected to any expressions implying compulsion of the authorities by the Association.

Dr. SIBSON said that when the deputations from the Metropolitan Counties Branch were formed, he, as President, took charge of the memorials. The Branch Council had caused the memorials to be drawn up in what was thought the most fitting language; and his own opinion was that, if they had not stated the simple truth, they would have been traitors to their medical brethren. That all that had been stated was the truth, they were in a position to prove to any two gentlemen, to be nominated by the President and Dr. WOOD. As to the grievance of branding being removed, the matter was mentioned in the report drawn up by Dr. Henry. He would repeat that there was a full statement made in the report with respect to the issue of the order of December 1858. The Warrant was issued in October 1858, and the second Warrant, withdrawing the first,

so far as it related to medical officers presiding at Boards of Inquiry, was not issued until May 1863. The Warrant was the issue of the Royal Prerogative, and ought to carry obedience from the highest to the lowest subject; and neither the Commander-in-Chief nor the Secretary of State had any right to transgress that prerogative. The authorities had been guilty of a breach of faith in this respect, and also in withholding the publication of the alteration they had made in the Warrant, whereby men joined the service under wrong impressions. The Director-General had shown that he had no concern in this transaction. Dr. Sibson alluded to the anomaly of a junior medical officer being received as a member of a board, whilst a senior medical officer was merely a witness. As to the objection, that the presidency of boards would give the medical officers the power of arrest, Dr. Sibson said that it was not wanted that they should have the power of arrest, but that they should be treated like gentlemen. If the privileges demanded were conceded, the authorities would never find that they gave the medical officers more than they received from them. Instead of the third-rate men, with whom they said they were now content, men of first-rate talents would join the service. He trusted that the Association, which had done good service for the medical men of the navy, would also do equally good service for those in the army.

Dr. TUNSTALL (Bath) expressed his regret that any opposition should have been offered to the report of the Council. The medical men of England considered the profession degraded by the manner in which the medical officers in the army were treated.

Dr. LAYCOCK (Edinburgh) thought they were not in possession of the actual facts as regards the army medical officers, and that it would be advisable to adjourn the debate. There were various points on which they required more knowledge; and it was due to the public, as well as to the profession, that these points should be cleared up. Let them have an opportunity of discussing the question, so that the voice which went forth might be a deliberative voice, as on this would depend much the effect that was produced.

Dr. WOOD seconded Dr. Laycock's amendment.

SIR CHARLES HASTINGS thought they had better not adjourn the debate, as they would then not have time for the scientific business.

After some remarks from Mr. Lord, the President, the Secretary, and other members, a few verbal alterations were made in the report, and it was adopted in the form in which it now appears.

#### APPOINTMENT OF AUDITORS.

Mr. BARTLETT (Camden) moved, Dr. TUNSTALL seconded, and it was unanimously resolved—

"That the best thanks of this meeting be given to Dr. Melson and Mr. Hadley of Birmingham for auditing the accounts of the Association: and that they be requested to continue their services for another year."

#### VOTE OF THANKS TO THE COUNCIL.

Mr. PROPERT (London) proposed, and Mr. GEORGE JONES (Birmingham) seconded, and it was resolved—

"That the thanks of this meeting be given to the Councils of the Association for their valuable services during the past year."

#### APPOINTMENT OF SECRETARY.

SIR CHARLES HASTINGS spoke of the admirable manner in which the General Secretary performed his duties, and proposed—

"That Mr. Watkin Williams be appointed Secretary to the Association."

Dr. STEWART seconded the motion; which was unanimously carried.

## THE ARMY MEDICAL SERVICE.

Dr. STEWART moved, Mr. BARTLEET seconded, and it was resolved—

"That the President, Sir C. Hastings, Dr. Radcliffe Hall, Dr. Sibson, Mr. Bartleet, Dr. Falconer, Dr. Richardson, Dr. Routh, and Dr. Stewart, be appointed a Committee, to consider what steps should be taken to carry out the recommendations of the Council in reference to the Army Medical Service; and to report thereon at a future sitting of the Association."

## CONVERSAZIONE AT GONVILLE AND CAIUS COLLEGE.

Gonville and Caius College is the senior of the two Cambridge Colleges which recognise and support more than any of the others the Medical Faculty; and the Master and Fellows invited the members of the Association to a *conversazione* in the College Hall on Wednesday evening, at nine o'clock. The invitation was very numerously responded to, and the entertainment highly pleasing. The *conversazione* was held in the dining-hall of the College, a comparatively recent structure of great architectural beauty and adornment. The roof of the hall, which is beautifully ornamented, attracted considerable attention. There were suspended from the walls, the portraits of some of the chief worthies whom the College has produced. Among these, we noticed a fine painting of the celebrated Harvey, by Rembrandt; another of Dr. Caius; whilst the Divinity Faculty was represented by Jeremy Taylor and others; and that of Law by the late Baron Alderson. On the hall-tables were arranged a variety of interesting objects; and these formed the principal feature of attraction. A skull of *Bos primigenius*, with a flint weapon driven into it during life, discovered, in 1863, at a village in the county named Burwell, was sent for inspection by Mr. James Carter, a local surgeon, and also a geologist of some considerable attainment. Messrs. Smith, Beck, and Beck, had a display of microscopes and microscopic objects. Mr. Coxeter had a valuable assortment of surgical instruments; and among them, Dr. Routh's curved hysterotome attracted much notice. The crystal cube statuette miniatures, from the establishment of Mr. Henry Swan, were the object of much curiosity. By means of this invention, a miniature representation of the human form or bust is obtained, appearing as a perfectly solid figure, the image being apparently imbedded in the thickness of a small enclosed block of glass or crystal, and with the form and expression far more beautifully defined than is possible in a flat portrait. This is effected by a new application of the principles of binocular vision. Messrs. Weiss and Co. also had an assortment of surgical instruments; and, besides the objects to which we have already drawn attention, there was a great variety of binocular and ordinary microscopes, a thermometer for ascertaining the heat of the body, photographs illustrative of anatomy, pathology, etc., in the oxy-hydrogen lantern, and other curiosities. The *conversazione* was kept up till about eleven o'clock; and during the evening refreshments were obtainable in the Combination-room.

## THURSDAY.

## COMMITTEE OF COUNCIL.

The General Council this morning elected the following ten members of their body as members of the Committee of Council for the next year: E. Bartleet, Esq. (Camden); P. Cartwright, Esq. (Oswestry); M. H. Clayton, Esq. (Birmingham); R. W. Falconer, M.D. (Bath); W. D. Husband, Esq. (York); B. W. Richardson, M.D. (London); G. Southam, Esq. (Man-

chester); A. T. H. Waters, M.D. (Liverpool); E. Westall, M.D. (Caterham); and M. A. E. Wilkinson, M.D. (Manchester).

The second general meeting commenced at eleven o'clock; Dr. PAGET, President, in the chair.

## PRESENTATION OF THE HASTINGS GOLD MEDAL.

The PRESIDENT said the first business was of a very pleasing nature—the presentation of the Hastings Gold Medal to Dr. Thudichum. This was the first time the medal had been awarded; and three more competent judges than those who had awarded it could not well be found. He thought they would agree with him that the most proper person to present this medal was Sir Charles Hastings.

Sir CHARLES HASTINGS (Dr. Thudichum having come forward amid warm cheers) said it gave him unspeakable pleasure to stand up in the Senate House of this celebrated University to discharge a duty at once so pleasing and so important. When the Association was founded, one of its objects was the promotion of original research in the obscure parts of medical science; and as one of the means to promote this object, it was thought desirable to establish prizes which might call into exercise superior talent. Circumstances had hitherto prevented the Association from carrying out this plan; and it was not till this year, when they held their meeting in this great University, that he had the honour of presenting to a distinguished member of that Association the first gold medal that the Society awarded. They did not present this medal to an unknown member of the profession; but to one who had already distinguished himself on many occasions as a painstaking man, and as a proficient in original research; and he (Sir Charles) was glad to find that it was to be presented in consequence of the award of three of the most distinguished medical men in this country, who were known to all, and whose guarantee was a sufficient guarantee that the prize was awarded to a worthy individual. Nay, more, he had heard it as the opinion of one of those gentlemen that, if it should turn out that Dr. Thudichum's facts and arguments were as conclusive as at present they appeared to be from his paper, this discovery of his, with respect to urochrome, would prove to be one of the most important discoveries in medical science during the present day. Having been so long connected with the Association, he need not say how much pleasure it gave him to present to Dr. Thudichum this medal, and to express to him the congratulations of this Association. [*Cheers.*]

Dr. THUDICHUM received the medal amidst the warm plaudits of his fellow-members, and then shook hands with Sir Charles and the President.

## ALTERATION OF LAW.

The GENERAL SECRETARY proposed an alteration in Law 15, making December 1st, instead of December 25th, the latest day on which he could receive notices of resignation.

Dr. RICHARDSON (London) seconded the proposal; which was carried.

## PLACE OF MEETING FOR 1865: PRESIDENT-ELECT.

The PRESIDENT announced that, in Council that morning, it had been resolved, on the motion of Dr. Richardson, seconded by Mr. Pemberton, that Leamington be recommended as the place of meeting next year, and that Dr. Jeaffreson be the President-elect.

Sir CHARLES HASTINGS proposed the adoption of that recommendation. Leamington was a beautiful watering-place; and the members there had every appliance for receiving the Association.



The Rev. Dr. BELL seconded the motion; which was unanimously carried.

Dr. JEAFFRESON thanked the meeting. Of course, they could not give in Leamington such a reception as that which had been given in the University of Cambridge. He felt considerable modesty in taking the chair after Dr. Paget; he and Dr. Paget, however, were of the same mind as to the Association; they pulled in the same boat—but with how different *sculls*!

#### PAPERS.

The following papers were read.

1. Some of the Causes of Excessive Mortality after Surgical Operations. By Spencer Wells, Esq.

Dr. ROUTH (London) said the main question was—how were the spores to be got rid of? The question resolved itself into one merely of ventilation; and he should shew that a plan had been tried which got rid of these creatures which inhabited the atmosphere. Openings at opposite sides of rooms had been tried; but the plan had been found impracticable, inasmuch as patients could not bear to have the windows open; and even if they could, the spores still continued in the air. In the Samaritan Hospital, a plan had been introduced, which had proved very successful—that of putting in the highest point of the room perforated zinc, which allowed the change of air in the room, and prevented the admission of these spores. The plan acted on the same principle as a chimney in drawing out the bad air, whilst all the fresh air came in from the outside without being impregnated with these spores, which were kept out by the zinc. It was a great evil that this central chimney did not exist in more hospitals than it did. He had adopted the same principle in the Cripples' Home, and was quite surprised at the changed state of health existing among the children.

Dr. THUDICHUM (London) had given some attention to the subject; and with regard to an allusion in the paper to the use of old bandages, etc., said that no washing or chemical processes could erase the stains from the cloths which had been used for decomposing wounds. He had noticed the hospitals where old bandages were not used; and the result of the comparison was such that he would advise that all bandages, lint, and in fact everything brought into contact with a decomposing wound, should be burnt. He alluded to certain sporules which were found in thousands and in millions in the muscular fibre in cases of open wounds, where they multiplied at a marvellous rate.

Dr. CAMPS (London) thought a good deal depended, in the matter of mortality, on the after treatment adopted. Dr. Valentine Mott, of New York, who had as much experience and success in these matters as most men, freely used opium. He (Dr. Camps) thought the use of opium might be more freely introduced in our hospitals, as it was proved to have a very satisfactory effect. The after-treatment, no doubt, had a great deal to do with the final issue.

Dr. RADCLIFFE HALL (Torquay) said that in the Exeter Eye Hospital, a simple plan had been introduced which had proved very successful. It was simply to have a stove in the usual fire-place, with an aperture close under the ceiling, through which a tube passed down to the stove. The stove, having a closed door, received the foul air, which was charged with spores, so that these were got rid of, and the air was purified. At Torquay the plan had been adopted with as much success as at Exeter.

Mr. MOORE (London) said the matter under discussion involved the question—What is a patient? A patient in London and a patient in the country were very different. An important consideration, too, was the material of which the hospital walls

were composed. The material should be such as would bear constant washing down, so that offensive materials might be removed.

Mr. SANSOM (London) said the great cause of danger was pus; and the way to lessen the danger was to provide means for preventing the formation of pus. Healthy men who had wounds, etc., should be separated carefully from those who were unhealthy, as the pus in the one case was very different from that in the other.

Mr. SPENCE (Edinburgh) thought too much reliance was placed upon general statistics. Very much as to the percentage of deaths after amputation depended upon the particular part of the body where the amputation took place; and a great variety of circumstances influenced the result even of amputations in the same locality of the body. The comparison of cases which had been treated under precisely similar circumstances would lead to much more accurate conclusions than mere generalised statistics.

The PRESIDENT, in concluding the discussion, said that reference had been made to the improvements at Addenbrooke's Hospital. The author of the paper had alluded to the addition of the third story as injurious. He (Dr. Paget) agreed with him; and though he had at the first been one of the chief promoters of the alteration, yet at the last he so entirely disapproved of the course pursued, that he felt bound to disclaim any responsibility in the matter. Still the arguments in favour of the proposed alteration were strong, and it was thought that the new hospital would be a great improvement on the old one. He regretted that the gentleman who had so ably maintained these arguments was not now present; but, for his own part, he thought that a great mistake had been committed.

2. On the Action of Anæsthetics; and on the Administration of Chloroform. By A. E. Sansom, M.B.

Dr. GIBBON quite agreed with the opinions set forth by Dr. Sansom, and thought his instrument a good one. His own practice had led to the same results as that of Dr. Sansom.

Dr. RICHARDSON was very gratified at Dr. Sansom's remarks, and thought that in the main he was right. There was nothing mysterious at all about the action of narcotics, as they all acted in just the same way. Every substance which produced anæsthesia produced also a change in oxygenation. Oxygen produced combustion; and the whole fact lay in this process of combustion, and in nothing else. With respect to chloroform producing convulsion, Dr. Richardson showed that the action of this narcotic was not on the brain, as was too often supposed, but on the blood.

Mr. CLOVER (London) expressed his general agreement with Dr. Sansom.

Mr. SOLOMON (Birmingham) had administered the narcotic by letting it fall drop by drop on a piece of coarse flannel, until the patient became insensible. If there were any evil symptoms, the cloth was removed and the window opened; and thus no death had occurred in the course of ten years' experience of this course of treatment.

3. The Radical Cure of Extreme Divergent Strabismus. By J. V. Solomon, Esq.

Mr. HART (London) admired Mr. Solomon's plan, but suggested that prismatic glasses, of sufficient power, might be made to produce the same result.

Mr. SOLOMON replied, that prismatic glasses had been tried; but no person could bear to use them long enough to be cured by them. Moreover, these glasses had been found quite insufficient to cure anything like a severe squint; and he would ask Mr. Hart if he had ever met with such a case of extreme divergence as that which he (Mr. Solomon) had exhibited, which

had been cured by means of these glasses. He (Mr. Solomon) knew of none. The practice of ophthalmic surgery bore him out in saying that such a cure could not be effected.

4. The Use of the Hysterotome in Uterine Disease. By C. H. F. Routh, M.D.

The meeting then adjourned.

#### CHORAL SERVICE IN KING'S COLLEGE CHAPEL.

King's College Chapel is the most magnificent architectural pile of its style in the kingdom; and it is celebrated for the magnificence of its organ, which is worked by hydraulic power, and of its choral services. On the afternoon of Thursday, at 3 o'clock, a large number of members of the Association met, by permission of the Provost and Fellows, in this chapel, when full choral service, with a beautiful anthem, was performed. The responses were by Dr. Elvey; the chant to the Psalms by Attwood; the *Magnificat* and *Nunc Dimittis* by Ebdon; and the anthem, "O where shall wisdom be found," by Dr. Boyce. After service, Handel's very fine Overture to *Esther* was played as a voluntary; and, as the congregation were slowly retiring, the National Anthem brought the whole ceremony to a close.

The third General Meeting was held in the Senate House, at 4 o'clock; Dr. PAGET in the Chair.

#### INHALATION OF OXYGEN.

Dr. RICHARDSON exhibited an apparatus for the inhalation of oxygen. He said that oxygen, which had been so strongly recommended in the treatment of disease by Beddoes, Davy, and others, had never been fairly tested, from the reason that no means of procuring or of administering it readily had been found. The apparatus which he (Dr. Richardson) placed before the meeting was so simple that it could be used after a minute's preparation. Some months ago, Mr. Robbins, of Oxford Street, London, had discovered a mode of producing oxygen by means of acting on a substance rich in oxygen, with diluted sulphuric acid. Oxygen was thus evolved in large quantities and for a long time. He (the author), taking advantage of this method, had devised an apparatus for inhaling the gas. The apparatus consisted of two bottles, a connecting tube, and a mouthpiece. The powder was placed in one bottle, and the diluted sulphuric acid poured upon it. The oxygen thus evolved was allowed to pass into the second bottle through a little water; and from the second bottle, to which the mouthpiece was attached, the patient inhaled. After describing the apparatus and showing it in operation, Dr. Richardson noticed the cases of disease in which he had used oxygen evolved by the method received. He had used it in consumption, in congestion of the lungs, in asthma, and in uræmia, with obvious success. His great object, however, was to show the Association a means by which they might easily and comprehensively determine the exact value of oxygen as a therapeutic agent.

#### THE ADDRESS IN MEDICINE

Was read by E. L. ORMEROD, M.D. It appeared at p. 147 of last week's JOURNAL.

Dr. WEBSTER (Northampton) said they had all listened with deep interest to the able address of his old friend, and he might say fellow-student, Dr. Ormerod. He proposed—

"That the cordial thanks of this meeting be given to Dr. Ormerod for his very able and interesting address.

He had the more pleasure in proposing this resolution, as Dr. Ormerod was an old Cambridge man, representing his University and his profession with the highest credit to himself at Brighton.

Mr. HOUGH (Cambridge) seconded the motion, which was carried unanimously.

#### THE ARMY MEDICAL SERVICE.

Dr. FALCONER (Bath) read the following Report of the Committee appointed on the previous day.

"After long and extensive inquiry, the Commissioners appointed at the close of the disasters of the Crimean war, 'to inquire into the regulations affecting the sanitary state of the army,' made certain recommendations in reference to the medical officers of Her Majesty's Army, which were embodied in a Warrant issued on the 1st of October, 1858.

"The sixteenth and seventeen clauses of this Warrant granted to the medical officer relative rank, 'with all precedence and advantages attaching to the rank to which it corresponds, except as regards the presidency of courts-martial.' 'But when a medical officer is serving with a regiment or detachment, the officer commanding, though he be junior in rank to such medical officer, is entitled to a preference in the choice of quarters.'

"This Warrant gave complete satisfaction to the army medical officers and the general body of the medical profession; but on the 31st of December, 1858, before the Warrant could be brought into full operation, a general order was issued from the Horse Guards, depriving the army medical officers of the right, granted to them by the above mentioned Warrant, of presidency at all boards, excepting courts-martial, when such medical officer was the senior officer president. By this general order, the most important provisions of the Royal Warrant were contravened.

"That this general order, though acted on, did not receive the sanction of the Royal prerogative till the 1st of May, 1863, when a Royal Warrant was issued, modifying Clause 17 of the Warrant of 1858, in the following terms: 'But such relative rank shall not entitle the holder to military command of any kind whatever, nor to the presidency of courts-martial, courts of inquiry, committees or boards of survey; but when the president of such courts, committees, or boards, shall be junior to the officer of the civil department, then such member of the civil department shall attend as a witness, and not as a member.'

"There is no desire on the part of the medical officers of the army to exercise any purely military functions; but they consider that they are justly entitled to preside at all courts, committees, or boards, where their relative rank qualifies them so to do. To this, however, it has been objected by the highest authorities, that a due regard to discipline, and the necessity of withholding from the medical officer the power of arrest, have rendered it inexpedient to carry out the Warrant of 1858. Such power of arrest has never been desired by the medical officers of the army.

"But that the provisions of the Warrant of 1858 do not interfere with discipline, has been shown by the experience of a century in India, where medical officers sat on boards according to their rank, and assumed the presidency when they were senior, without at any time leading to the subversion of discipline. Such was the practice in India until 1858, when a Horse Guards order changed in a moment the custom of a century. Hence, in a great measure, has arisen the difficulty experienced by the Secretary for India in filling up the vacancies in the Medical Department of the Indian Army, and in attracting to that service men of the same high qualifications as formerly competed eagerly for those appointments.

"The recent issue by the Director-General of an advertisement for acting assistant-surgeons, without examination, sufficiently testifies to the disfavour with which the non-enforcement and ultimate withdrawal of Clause 17 of the Warrant of 1858 has been regarded, and manifestly tends to the further dete-



rication of the army medical service by admitting into it those who have been unable to attain a position in general practice, and by deterring those of higher qualifications from entering on a career which they would otherwise regard as the great object of their ambition.

"It must not be forgotten, that upon the efficiency of the Army Medical Department ultimately depends the vigour of the British Army, to which the casualties of War are far less fatal than sickness due to the want of sanitary arrangements, which the highly qualified medical officer knows so well how to establish. And, without insisting upon the importance of the question in an economical point of view, it must be admitted by all that the British soldier is entitled to the best medical skill that can be provided for him by the state.

"Under these circumstances, the Committee recommend that the collective and individual influence of the Association should be directed towards the restoration in its integrity of the Royal Warrant of 1858, and its subsequent enforcement; and also towards the discontinuance by command of the employment of acting assistant-surgeons without examination. The most obvious means for carrying out this recommendation is the adoption of memorials, by this Association and its Branches, to the Secretary for War, the Commander-in-Chief, the Secretary of State for India, and the Director-General of the Army Medical Department. But they attach the greatest importance to the thorough discussion of this question by both Houses of Parliament; and, with this view, they recommend the adoption of petitions to the legislature, and the communication to individual members of the fullest information as to a question so closely related to the welfare and efficiency of the British and Indian armies.

"G. E. PAGET, *President*.

*Cambridge, August 14th, 1864.*"

Dr. FALCONER briefly moved the adoption of the Report.

Dr. EVANSON (Torquay) seconded the motion. He had seen the Under Secretary at War lately, and a few words passed between them on the subject of this Report, which showed a disposition on his part favourable to considering the claims of medical men in the army, though there were some difficulties which required to be got over. He (Dr. Evanson) attempted to show him that by the Warrant of 1858 a medical officer in the army received the position of a gentleman; and a medical man had then no hesitation in joining the army, because this fact of his being a gentleman, equal in position with the other officers, was acknowledged. He wished to second this resolution, because it was most essential to the carrying out of their object. Still they must do everything in a quiet gentlemanly manner, not attempting to dictate to the powers that be, but remembering that their difficulties would be increased if they forgot what was due from them as gentlemen. [*Cheers.*]

The Report was unanimously adopted.

Dr. STEWART (London) said that, after the lengthy discussion of yesterday, he would not enter further into details; but the question presented itself—what should now be done? They wanted actions rather than words. It was quite clear that, if anything were to be done for the medical officer in the army, they would require great strength to do it, and that Parliament must be their field of operation. They must be able to command a large amount of force in the House of Commons; and he looked forward to next February as a time when the waging of a great warfare would be commenced in Parliament. He proposed—

"That petitions and memorials from this meeting of the Association, in accordance with the report just

read, be prepared and presented to the Secretary for War, the Commander-in-Chief, the Secretary of State for India; and that the further carrying out of the recommendations of the report be referred to the Committee of Council."

Mr. CEELEY (Aylesbury) seconded the motion, which was unanimously carried.

#### PAPERS.

The following papers were read.

5. The Diagnosis of Early Pregnancy. By C. H. F. ROUTH, M.D.

6. The Physiological Meaning of Inframammary Pain. By Samuel Martyn, M.D.

#### CONVERSAZIONE AT DOWNING COLLEGE.

On Thursday evening, the members were entertained by the Master, Professors, and Fellows of Downing College, at a most successful *conversazione* in their Dining Hall, and notwithstanding the happy result of the somewhat similar entertainment on the previous evening at Caius College, we can but compliment Dr. Latham on his success in having secured, with some few exceptions, almost an entirely different exhibition. Soon after nine o'clock, not only the members of the Association, but large numbers of members of the University filled the Hall, representing almost all professions; and these were soon followed by a large number of ladies, who had been entertained at the lodge of the Downing Professor of Medicine, by Dr. Fisher.

The microscopic department was well represented in some very beautiful instruments, by Mr. Ross, Messrs. Smith and Beck, Mr. Pillscher, Mr. Samuel Highley, and Mr. Baker, exhibiting to the greatest perfection some of the most exquisite preparations that skilful mounting could accomplish. Amongst those which called forth general praise were some slides of selected diatomaceae, some polycystina, and some marine polyzoa. Messrs. Whicker and Blaise exhibited a large collection of surgical instruments, apparatus for fractures, and supports and instruments for deformity. Mr. Ernest Hart's demonstrating ophthalmoscope, showing the choroidal and retinal arteries in the eye of a rabbit, was also exhibited. This instrument can be used without the necessity of a dark room, with perfect ease. Messrs. Weiss and Son, and Messrs. Maw and Son, also exhibited some instruments. Portraits of many eminent medical men were exhibited; amongst them were the members of the Medical Council, very well executed by Mr. G. R. Fitt. Mr. Mayland also exhibited a very fine collection of "Photographs of Views of Cambridge." Dr. Thudichum again gave some very graphic descriptions of the *Trichina*, and exhibited the parasite living, in various stages of development; which he obtained from the muscle of a rabbit infested with them, and also from some pork chops. He believes that, if meat thus affected is thoroughly cooked, the entozoon is entirely destroyed. Mr. Dickson of Downing College had a most interesting table of microscopes, exhibiting circulation in healthy and inflamed tissue, and an exquisite section of the spinal chord; also some natural history specimens, amongst which the "*Actinophrys Sol*," and a specimen of *Rotifera* (*Brachionus Urcularis*), were extremely beautiful. Mr. Pain of Cambridge exhibited a most successful specimen of *Vallisneria* under a Ross' 1-12th inch power and highest eyepiece. In the combination room was Messrs. Aubert and Linton's "piping bullfinch;" and in a small darkened room Mr. Deck performed experiments showing the stratification of light by electrical discharges through rarefied media. Some beautiful specimens of delicate chemical substances crystallised in groups were exhibited by Messrs. Johnson; as well as some magnesium wire in

a state of combustion, the pure white light of which is used by photographers on account of its possessing actinic properties. During the evening the grounds were most brilliantly illuminated by a powerful electric light sustained by 40 Grove's cells (the platinum being 6 inches by 8 inches), under the direction of Mr. Ladd.

#### FRIDAY.

The fourth General Meeting was held in the Senate House, on Friday morning at 10 o'clock, Dr. PAGET, President, in the Chair.

#### REPORT OF THE MEDICAL BENEVOLENT FUND.

Mr. WATKIN WILLIAMS, General Secretary, read the following report :

"Although the income of the Fund during the past year has not equalled that of the year 1862-3, the Committee nevertheless have much reason to give a satisfactory and hopeful report of the condition and prospects of their charity.

"In the first place, the diminution in the amount received in donations and subscriptions during the past year, may in a measure be ascribed to the circumstance, that in the year 1862-3 considerable sums were received as the result of the appeal issued in the year 1861-2.

"The Committee beg to report that, during the year just past, the Donation Fund has afforded relief to seventy-eight cases of distress, at an expense of £538, and it also paid £140 to the Annuity Fund. And they may add that, howsoever great and direct has been the alleviation of distress by means of pecuniary aid, they feel that indirectly they have also afforded no slight amount of benefit by enlisting the active sympathies of others in behalf of the distressed, by inducing them to visit the cases and to administer the grants in such ways as were found to be most judicious. The Committee also feel that, by not unfrequently making grants conditional upon the co-operation of the friends of the applicants, they have often succeeded in obtaining permanent help to those previously helpless, and almost friendless.

"In the course of the past year, the sum of £236 : 17 has been invested for the Annuity Fund in bank stock; making the present income for annuitants amount to £443 : 12 : 6.

"The biennial appeal, in place of a public dinner, has been prepared, and is to be issued immediately.

"The Committee—with a desire to carry out the objects of the Fund as efficiently and, at the same time, as inexpensively as possible—have, at the suggestion of your Treasurer, appointed a Subcommittee to consider the best mode of working the Fund, and to revise its laws. The Committee trust that the effect of the labours of the Subcommittee will be apparent in their next Report.

"The Committee again thank the Honorary Local Secretaries and the ladies for their valuable aid; and, in conclusion, they beg to express their conviction, derived from increased experience, that the principles on which the Medical Benevolent Fund is conducted, are the principles of true Christian charity, and they look forward with confidence to its increased success."

Mr. PROPERT (London) proposed :

"That the Report be received and adopted."

He regretted that the funds of this institution were not quadruple their present amount; for there was no society in the world that did more good, in proportion to the means at its command, than this Benevolent Fund. In moving that the Report be adopted, he might add that he was glad to hear that another appeal was to be made to the profession, and he hoped that it might be most liberally responded to.

Dr. VOSE (Liverpool) seconded the motion, which was unanimously carried.

#### MEDICAL PROVIDENT FUND.

Dr. RICHARDSON read the following Report of the Committee appointed at Bristol to consider the desirability of establishing a Provident Fund :

"The Provident or Relief Fund Committee was appointed last year at the Bristol meeting, to consider and report on the question, 'whether it be possible to establish, under the direction of the Association, a Relief Fund, which shall enable the widows of members, or members themselves, during sickness, to receive pecuniary aid, by annuity or otherwise, on the principle of mutual protection and right.'

"The Committee has to report that its first meeting was held at Birmingham, the second in London, and the third at Cambridge. A Subcommittee was also appointed by the first meeting, and has been actively engaged.

"The Committee has aimed at the attainment of two objects: First, to procure trustworthy information on the whole subject; and, secondly, to frame such suggestions as appear, after due inquiry, to arise out of the facts that have been collected.

"Before entering into particulars, the Committee would briefly observe that, in the course of its labours, they were for a moment interrupted by the suggestion that an enlarged annuity scheme, in extension of that which became law during the last session of Parliament, would probably be introduced at an early period by the Chancellor of the Exchequer. The chairman of the Committee was, therefore, directed to ascertain, if possible, whether this statement was well founded; and he has been informed by Mr. Gladstone, that 'the Government have not formed any such intention as that referred to.' This supposed obstacle is, therefore, removed.

"The Committee would next report that, owing to the difficulties of arriving at a correct decision by their own efforts, it was agreed, at the first meeting, on the suggestion of Sir Charles Hastings, that the Subcommittee, consisting of the chairman and Dr. A. P. Stewart, should consult Mr. Tidd Pratt, and take his opinion on every essential point of the project. This has been effectively done; and upon the information thus obtained, the following statements are based.

"1. The Committee is satisfied that, in considering a scheme for the formation of a Relief Fund, it is essential that two of the elements suggested at the Bristol meeting—namely, the granting of annuities, and the making provision for widows and orphans—must be entirely abandoned; and that the fund must be devoted exclusively to payments to sick members. Deferred annuities are now so easily purchasable from Government, and insurances are so readily effected with good offices, that this decision of the Committee calls for no regret.

"2. By directing the attention of the Association solely to one object, there is no doubt that a provision against sickness could be easily and economically secured; and the Association, through its branches, affords an organisation admirably adapted for obtaining these benefits.

"3. The number of members necessary to give stability to such a fund must not be less, according to Mr. Pratt, than two hundred. He states that 'two hundred would be enough to enable the fund to start with a sufficient average.' This is the lowest estimate; but the Committee do not doubt that, the scheme being once established, a sufficient number of members would be obtained to ensure its permanence. It is, of course, understood that the fund



would only be joined by persons actually in good health.

"The payments must necessarily vary with the age at which the subscriber commences his membership; but the Committee have taken the age of 35 for the purpose of illustration. They have also taken a payment of £2 a week for the same purpose. They find that, at the age of 35, the £2 a week can be secured by the payment 17s. 1d. per quarter, or £3:9 per year. To this must be added a small sum, of from 3s. to 5s. per year, for the working expenses of the institution. The payment would be continued, in case of need, for one year without diminution; and for a second year at a reduction of one-half. It would, in any case, terminate at the age of 60. These statements are based upon the experience of fifteen successful institutions; and may be considered absolutely certain. If larger payments are wished for, they may be made by multiplying the above figures. It would be necessary that members should contribute for one year before they became entitled to relief.

"4. In forming a Provident Fund in connexion with the Association, three modes of action present themselves; namely:

"a. By enrolment under the Friendly Societies' Act.

"b. By independent association without legal sanction.

"c. By obtaining a Royal Charter of Incorporation.

"The first of these is objectionable, because it would necessitate the enrolment of each separate branch as a distinct society, without any federal centre.

"The second plan, or independent association without legal sanction, is perfectly feasible; but the proceedings would rest entirely on the good faith of the members and the management. The Committee feel, however, that the organisation might safely commence on this basis.

"The third plan—that of obtaining a Royal Charter of Incorporation—is, in the opinion of the Committee, by far the best. It would place the Association in a position that it has never before attained; it would give a legal authority to all its statutes; it would render the Relief Fund permanent; and would powerfully contribute to the stability of the Association. Mr. Pratt is of opinion that, on the basis of the Provident scheme, the Charter could be easily obtained; and he has sketched out for the Committee the method of applying for it. The Committee find that such a Charter would cost from £250 to £300.

"The Committee would suggest—

"1. That the Relief Fund might be commenced forthwith, from the nominal date of the first of July last past; and that the subscribers should be eligible to receive benefit from the 1st of July, 1865, after payment of their second annual subscription.

"2. That, in order to carry out the project, a Board of Directors should be nominated in the following manner: to wit—

"One director to be appointed by the members or Council of every Branch; or, in the case of very large Branches, two or even three directors, in proportion to the numerical strength.

"Three or five directors to be appointed by the Committee of Council, on account of members not represented by Branches.

"A chairman to be elected by the annual meeting from the body of the Association.

"The directorate thus formed to have power to appoint their own officers, and to determine their remuneration. They shall furnish the annual report at the time of the annual meeting.

"3. A question which has given anxiety to the

Committee is, whether the Relief Fund should be open to the profession generally, or should be limited to the members of the Association. A large majority of the Committee are in favour of the latter scheme; against which it is only urged, that membership of the Association, being of the nature of a luxury, ought not to be a condition precedent to an act of foresight and self-denial.

[Dr. Richardson here said that one of the members of the Committee, Mr. R. B. Carter, had sent in the following protest in reference to the clause which had just been read.

"Stroud, August 3, 1864.

"The undersigned is desirous to call the attention of the Association to the question, whether the proposed Provident Fund should be open to the profession generally, or to members of the Association only.

"Upon reflection, the undersigned feels more and more strongly that its limitation to members of the Association, would be a great and unjustifiable hardship to many struggling men. Such a limitation might, as is justly urged by the majority of the Committee, bring new members into the Association; but would it not certainly keep others, and those the most necessitous (for whom their more fortunate brethren are surely bound to take thought), from sharing in the benefits of the Provident scheme.

"The undersigned begs leave to suggest that the Association might include two forms of membership—membership of the Provident Fund and membership of the General Fund; and that it should not be compulsory to belong to both or neither. He is strongly of opinion that men who joined the Provident Fund would be certain to join the General Fund when their means permitted them to do so; and he would venture to hope that the great majority of members of the General Fund would support the Provident Fund also. But he would much regret that the tax of an extra guinea should stand in the way of any practitioner of small means who yet wished to secure himself against want in the time of sickness.

"ROBERT B. CARTER, F.R.C.S.]

"4. Another question of importance is, whether the sick members during convalescence should be absolutely debarred from any act of professional work. On this point, Mr. Pratt is of opinion 'that no member should receive relief in sickness from the Fund, if he is capable to attend to any professional labour'; but the Committee think that this question may be safely left to the patients, and to those who sign certificates for them; and that such certificates should declare *unfitness* for work, rather than positive disability. This, as a matter of detail, the Committee would leave to the directorate.

"5. The Committee have reason to believe that, if the Fund were established, donations and legacies would be added to it; but all the calculations have been made irrespectively of such a source of income.

"6. To meet preliminary expenses, should the Association adopt the Report of the Committee, a moderate grant from the funds will be required. The Committee would suggest a sum of £50, to be paid by the Treasurer as it was demanded.

"7. It would devolve upon the Board of Directors to prepare detailed rules and bye-laws as soon as possible, and to circulate them extensively in the profession.

"8. In conclusion, the Committee cannot too strongly urge the importance of the suggested Royal Charter of Incorporation; which, though incidental to their inquiries, would greatly strengthen the cause they have at heart.

"Signed, on behalf of the Committee,

"B. W. RICHARDSON, M.A., M.D., Chairman.

"Cambridge, August 3d, 1864."

Dr. RICHARDSON, in moving the adoption of this Report, and that it be acted upon, said that it had been so carefully drawn up that it required little explanation from him. Everything in the Report was placed in a clear, intelligible manner, and everything that was said might be relied upon. He regretted that the Committee had been obliged to withdraw two elements; viz., the establishment of a fund for deferred annuities, and another for the relief of widows and orphans. The question had been thoroughly debated; and Mr. Tidd Pratt had shewn the Committee that the three schemes could not be worked together by an association of this description, and therefore they had arrived at the conclusion that only the provident part could be carried out, and that the other two elements must be withdrawn, if they were to get on at all. It was easy to get deferred annuities from several sources; and it would be better for the directors of the Fund to become the agents of the Government, than to run the risk of carrying out the insurance for them themselves. With regard to the widows' and orphans' fund, the Committee had considered that the scheme would be too difficult: the supervision necessary could not be exercised throughout the country, and therefore the idea had been thrown on one side. When such a fund had been formed, as in London, and with success, safety was derived, not from subscriptions, but from legacies and donations. If the Association carried out the scheme of a widows' and orphans' fund, they would require each member, instead of paying about £4, to pay £8 or £9 *per annum*, and this could not be expected—the financial difficulty put this out of the question. In the Provident Fund simply, they might look for success. A member by paying £3:10 *per annum*, or £7 if he wished, and receiving in return at the rate of £100 or £200 a year during sickness, need never work himself to death, but would always feel comfort in knowing that there was something to fall back upon in the time of need. With regard to this scheme, the Committee had given no opportunity for anyone to say that it was trammelled by what might be considered exclusive powers; and it was due to the founder of the Association to say that he had throughout insisted on giving to the scheme that true spirit of catholicity which was his own spirit. The Committee had thought it expedient, therefore, that every Branch should become a centre, round which the members should gather, and in which the executive should be carried out. The directorate would be formed mainly by members sent by the various Branches; but, as the duty of representing those who did not belong to the Branches had to be considered, the Committee had come to the conclusion that it would be advisable that the Committee of Council should elect to the Executive Board directors to represent those members of the Association who did not belong to Branches. They felt, too, that the President of the Directorate should be appointed by the whole Association; and thus at the Board he would exercise a more independent power, and would be the responsible man between the independent Branches and the Association. The Committee had now done what they were appointed to do, and their existence and labours were thus far at an end: it was for the Association to say whether it was satisfied with those labours, and whether the project should go on. He was sure that, if they carried this Report, it would be the greatest event in the annals of the Association, and they would always refer back to this meeting in the University of Cambridge, as that from which this act had come, with heartfelt pleasure. The passing of this Report would lead to the strengthening of the Association, to the ensuring of its permanence, and

to making each member feel more towards another as a brother. He moved:—

“That the Report be received and adopted.”

Sir CHARLES HASTINGS rose with great gratification to second the motion. He could call to mind that, more than thirty years ago, when this Association was established, their best energies had been directed to establish an Association which should accomplish the objects set forth in the report they had just heard read; but at that time they were obliged to give the matter up, though they hoped the time would come when they would be able to carry out this object. That time had now come; and if this report were adopted, it would be in the power of every member, however small his means, to guarantee for himself the means of support in the time of sickness. There were many in their profession to whom illness came, and found them unable to fight against its difficulties; and many who entirely sank under those difficulties. He, therefore, thought that, if this great Association could bring forward a scheme to relieve this state of things, and could carry it out, it would be accomplishing a great work for humanity. He was very anxious about the matter when this measure was brought forward by Dr. Richardson; and so far as he was concerned, he was determined that everything that was done should be done on the soundest principles and under the advice of the most competent authority. Mr. Tidd Pratt was just the person whose advice they wanted; he (Mr. Tidd Pratt) had before him all the details of friendly societies, and he knew exactly their difficulties. And he (Sir Charles) was sorry to say that the history of friendly societies hitherto, was anything but calculated to afford them satisfaction. However, Mr. Pratt knew the circumstances, and had it in his power to direct them in the right course. He believed, moreover, that if this Association carried out the present report, the day would come when the other portions of the scheme might be attended to; that day might be far distant, but come the time would when, as medical knowledge and medical science advanced, they would be able to afford relief to those who were afflicted and those who mourned. [Cheers.] Sir Charles concluded by seconding the adoption of the report.

Dr. JEAFFRESON asked Dr. Richardson if the Committee took into consideration the statistics of the Indian Fund. He objected to their having merely a Provident Fund; and, as far as he knew, the Indian Fund was quite safe, though not supported by legacies and donations. If a scheme affording relief to widows and orphans were practicable in India, surely it was practicable also in England.

Mr. W. MARTIN suggested to Dr. Jeaffreson that he was in error, as the Indian Fund was now extinct.

Dr. GIBBON asked if the intended relief referred to accidents as well as to sickness?

Dr. RADCLIFFE HALL asked if it were possible that the scheme could commence on a sound working basis if it had but two hundred members. Safety depended upon averages; and could only be absolute when there were large numbers. A great deal, therefore, rested on the question of the least number with which the concern could be safely worked.

Mr. MANLEY (West Bromwich) asked, whether a person joining the Fund would have to undergo a critical examination like that instituted by the life assurance offices. A simple *bonâ fide* statement would not, he thought, be enough.

Dr. ROUTH (London) said that, if he understood this report right, a member of the Fund, when he reached 60 years of age, would no longer be able to obtain one single penny from that Fund. This he considered a great objection; for a man up to 40 years of age might be supposed not to need assist-



ance, and it was just when men approached the proscribed age that they were most likely to stand in need of relief. In this great mathematical University, he would propound this question—How many members present would be likely, in the course of the next ten years, to reach the age of 60? [Laughter.] How many, therefore, of those present would be excluded in that time from the benefit of this proposed fund? He thought that persons would not readily come forward with their money on these conditions; and that Dr. Richardson ought to give this part of the question very careful attention.

Dr. MILNER BARRY (Tunbridge Wells) asked if the Committee were aware of the existence of other similar societies to the proposed one, which allowed weekly payments to their members in time of sickness.

Dr. TUNSTALL (Bath) asked if Dr. Routh had not misunderstood the report. Was it not that persons could not be elected members after they had arrived at sixty years of age? [No, no.] Then he must decidedly agree with Dr. Routh. He could not see why persons sixty years of age, who had been long subscribers to the Fund, should be deprived of all advantage from the money they had paid.

Mr. DANIELL (Newport Pagnell) said he should look upon this Fund as precisely analogous to ordinary friendly societies. Those who were acquainted with friendly societies knew well how they acted; and he had himself been connected with them for forty years, and had established several which had turned out successfully. One society that he knew of, merely for labourers, secured to each member, for the payment of one shilling per month, medical attendance and provision during the time of illness. He thought it a great mistake for them to define the age at which a man should cease to be relieved by this proposed Fund. If he had paid his subscription, let him have the benefit of it until the end of the chapter; and this ought especially to be the case, since those who went past the age of sixty most needed help. Nor did he think that the Fund would thus be injured. It was not the old members, but the consumptive and otherwise diseased younger members, who were ordinarily the greatest drawback upon a friendly society. A man at sixty or seventy would probably soon die, and there was an end of him; but when the young man, who had just started practice and had his family about him, fell ill, he was the person who drew upon the Fund. He hoped this provision of the scheme would be amended; and, with Sir Charles Hastings, he felt confident that the day would come—not in his time, perhaps, nor in Sir Charles's—when there would be a widows' and orphans' fund. The Provident Fund now proposed he did not regard as a final measure; it was only an instalment. [Applause.]

Mr. HECKSTALL SMITH (St. Mary's Cray) had listened with great pleasure to the report read by Dr. Richardson; but he could not avoid rising to express his surprise that relief should cease to be obtainable at sixty years of age. The Fund would be established on precisely the same principles as those of the poorer classes; and there would be merely this difference, that for a multiple of payments there would be a multiple of receipts in time of sickness; and he took it, that there would not be a greater temptation to come upon the Fund among members of their profession than among the lower classes. The recommendation, that no relief should be administered to persons over sixty years of age, was a point on which the opinion of the Association should be taken. As to the examination before admission, the best authorities would tell them, on the authority

of the insurance offices, that the Fund would not be safe unless this examination were rigid.

Dr. THORP (Cheltenham) remarked, that he had lately found some letters as to the foundation, many years ago, of a similar institution in the West Riding of Yorkshire; and the great difficulties attending it were in the carrying out of minor details. As to the desirability of a Provident Fund, there could be no doubt. Medical men were the most improvident of all men. They thought more of others and less of themselves than any other class of men, though he hoped the time was coming when they would begin to think of themselves more than they hitherto had done. It was, of course, premature now to go into details; but he took it for granted that, whatever name this Fund received, it would be such a name as would guard against the possibility of its being thought an institution of a charitable character.

Dr. CORMACK (London) thought that there were matters of detail in the report, in which experience would from time to time demand some small changes; but he regarded the basis on which the Committee recommended the establishment of the Provident Fund as in the main thoroughly sound. He differed from Dr. Routh and Mr. Daniell as to the advisability of giving sick-pay after sixty. To do this with safety to the Fund, objectionably high rates would be required; for, after sixty, the annual amount of sickness is great and rapidly augmenting. In fact, sick-pay after sixty is a large variable annuity. This is shown by the collective experience of friendly societies, and is a point upon which there exists no difference of opinion among actuaries, though it is ignored in the tables of many of the certified societies of the labouring classes. He (Dr. Cormack) presumed that the Committee intended contributions and allowances to cease at sixty. It would be easy at some future time to add a table in which were combined sick-pay to sixty, and after sixty a small fixed annuity. The Committee had steered clear of shoals and breakers, and had brought forward a scheme which was quite sound, provided it were started with a sufficient numerical strength, and provided that strength were well maintained. In this branch of the subject lay the only flaw in Dr. Richardson's able exposition. He told us that two hundred members as a minimum would be adequate—in fact, that with two hundred the Provident Fund would be able to meet its engagements. He (Dr. Richardson) made this statement upon the authority of Mr. Tidd Pratt, but upon what authority did Mr. Tidd Pratt make the statement? It had yet to be seen at what average age members of the medical profession would join the proposed Provident Fund. Dr. Cormack's conviction was that young practitioners, confident in their health, and to whom three or four pounds *per annum* was an important amount, would hold back. Persons of doubtful health might at early ages seek admission; but, as a rule, the healthy would keep back till they were rising over the first difficulties of professional life. If this conviction were correct, or even a possibility, it showed that we could not assume that, if two hundred only joined, they would be men of a given average age. Small numbers combined with mixed ages upset all actuarial calculations; and friendly societies were perishing daily, not so much because they were founded on an erroneous actuarial basis, as because they had not a sufficiently large numerical basis for practical working. The rate of sickness obeys laws which have been pretty nearly ascertained. (Here the speaker referred to the number of days of sickness belonging to particular ages, and said that at his own age the days of sickness *per annum* were 16.48; if he were ten years younger, they would be 10.14; but if he were ten years older, they would reach 33.10.)

With such facts, was it possible to deduce safe working averages from two hundred cases? When claims come in early, the small friendly society, although built up on sound averages, is at once placed in jeopardy. Dr. Cormack said that he spoke strongly and decidedly on this point, not with a view of depreciating the report, but of urging the necessity of an immense effort being made at starting to get at least six hundred members. He had no doubt that such a number as six hundred would inspire confidence and secure permanent success. He would have great pleasure in voting for the adoption of the report in its integrity, and he heartily concurred in all the praise which it had received. [Applause.]

Dr. CAMPS (London) would draw attention to a fundamental question. It was suggested in the report, that the scheme should be carried out under a Royal Charter of Incorporation. Without going into details, he asked the meeting to pause before acceding to this recommendation. The report stated the advantages of this course; but it left unstated the disadvantages. If the Association obtained this charter, they might find their freedom of action very much hampered, and that they were no longer able to do what they liked and when they liked.

Dr. STEWART said there had been an entire change in his opinion since last year on this subject. When Dr. Richardson brought forward his scheme last year, he (Dr. Stewart) was struck with the desirability of carrying it out, and he hoped that the Association might be able to do so; but he feared the difficulties that might arise. He had been appointed to act in the matter with Dr. Richardson; and in their communication with Mr. Tidd Pratt, they had objected to the limitation of the age beyond which relief could be received. However, Mr. Tidd Pratt so strongly insisted on the point which had been so well touched upon by Dr. Cormack, that temporary sickness in old age very frequently resolved itself into permanent infirmity, that they were obliged to coincide. They were told that, if they did not go on this plan, the scheme must be an absolute failure; and therefore, though the feature was regarded as an unpleasant one, they were obliged to yield. He might add that, although various gentlemen had been associated with Dr. Richardson in preparing this report, yet the credit was entirely due to him; and the connection of others with him was merely nominal. Wherever extraordinary zeal and energy were required to carry through a project, Dr. Richardson was the man on whom they might rely.

Mr. LUND (Manchester) asked whether blindness and lunacy would be treated as illness, and whether a member receiving relief would be altogether precluded from exercising supervision over his business. As to the difficulty of age, he would suggest that with increased age there should be an increased payment. [Hear, hear.]

Dr. OGLE (Derby) in alluding to Mr. Carter's protest, said that he cordially approved of this movement, though he thought, that if they confined the benefits of the Fund to members of the Association, they would be proceeding on too narrow grounds. Let the institution be quite open to members of the profession generally.

Dr. BARHAM (Truro) remembered that it was attempted to establish a similar society to this in 1850, Sir John Forbes being chairman of the concern. He (Dr. Barham) most cordially supported the institution, as he did this; but he lost £100 by so doing, the affair proving a complete failure. The Society was open to the whole profession, and there was a branch for widows and orphans. Perhaps Dr. Richardson would state how far the committee had taken this former attempt into their consideration,

and also wherein it differed from the present scheme. He had great faith in Mr. Tidd Pratt, though he had known many an association to fail even when acting under his guidance. He (Dr. Barham) thought that five hundred subscribers was the smallest number which would make the Fund safe, and also that the difficulty as to age might be got over.

Mr. HEMMING (Kimbolton) thought the basis of two hundred was amply sufficient, if the thing were properly worked. He disagreed with the idea of excluding men over 60 years of age from benefit; he had had considerable experience of friendly societies, and he had always found more losses to a society from its young than from its old members. He hoped that this scheme would prosper, and that the old members and founders of this Association would put down their names as members, so that there might be no stigma, real or otherwise, cast on those who joined the Fund.

Dr. RICHARDSON replied to the various questions and objections. As regarded the Indian Fund, he might say that the Committee originally intended to look to the circumstances of every similar society; but the task seemed so difficult, that they had contented themselves by taking the newest facts and acting upon them; and they thought the experience of the present time was better than that of societies established many years ago. As regarded accidents, they had been included; in fact, everything that incapacitated a man for his work. Blindness and insanity were also included. In reply to Dr. Hall's questions about financial dangers, the practical working of the concern would rest with the Directorate, as well as the liabilities, though he considered that a body of men with an ordinary amount of intellect would not be likely to get into danger on this score. The greatest strictness would be observed, as no member would receive one farthing of relief, and would forfeit all he had hitherto paid, if his subscription were not paid at a given time in each year. As to health, they would receive a certificate from the medical man attending the member, that this latter was not in health; and of this medical man questions would be asked. But here, as in other matters of detail, a slight amount of latitude must be left to the Directorate. As to the great question of persons not receiving relief who were over sixty years of age, he might state that he would be quite satisfied to have the question referred to the Directorate, who would be happy to make any modification possible, though this was one of the strongest points that had been urged. They might, if they liked, risk raising the extreme age from sixty to seventy or seventy-five, though the average age at which relief was stopped was sixty, and ask for an increased payment from persons over sixty years of age. Still he thought the Committee had exercised a wise discretion in limiting this Fund to persons under sixty, whatever alterations might afterwards be made. In reply to Dr. Barry, he might say that the Committee knew of no similar society now in existence. "The Provident Fund" would be the name given to the society; though, if a better name were suggested, the Committee would gladly accept it. The average of 200 members included all ages, and it was based on the mean averages of the friendly societies of England. He thought this number amply sufficient to ensure success, though the Committee never dreamt that they would have so small a number as 200—more likely they would have 1000 than 200. Mr. Tidd Pratt said that with 200 the society would be workable; with 500, it would be most successful; and with 1000, it would be one of the best and safest societies in the kingdom. [Applause.] As to Dr. Camps and the Royal Charter, he felt quite certain that, if Dr. Camps had given twelve months' consideration to the



matter, as the Committee had done, he would have signed the report; but let it be understood that this matter of a Royal Charter was merely a suggestion at present—the Association was not in any way bound to it by the report. On the matter of sickness, it was not intended to be so rigid that a man should not, whilst receiving relief, superintend his business or see a patient. As to Mr. Carter's protest, he thought that the time might come when the profession generally would be admitted to the benefits of the society, though for the present they must be content with forming the Fund on the basis of the Association, with the Association as the nucleus. The Association had a fixed organisation, which the profession outside had not. He would add, that the threefold scheme originally suggested was too cumbersome for a society like this to work. In conclusion, he would state that he had received a promise from their late President, Dr. Symonds, of the sum of 20 guineas as a primary subscription to a guarantee fund [cheers]; 10 guineas from the President; 10 guineas from Sir Charles Hastings; and a letter from Mr. I. B. Brown, stating that he should be happy to subscribe 5 guineas. [Cheers.]

Dr. W. BUDD (Clifton) asked who was to give the medical certificate in case of sickness.

Dr. RICHARDSON: The ordinary medical man.

Dr. BUDD: That will be a very delicate matter.

Dr. RICHARDSON: The question will come before the new directorate.

Mr. HECKSTALL SMITH said the last few words of Dr. Richardson's reply had altered the face of the case considerably. It enabled him to ask a somewhat delicate question which he could not ask before—whether honorary members should be admitted to make payments?

Dr. RICHARDSON said that payments might be made towards lowering the rate of the ordinary contributions or towards a guarantee fund.

The Rev. Dr. BELL (Goole) asked to have his name put down for £5.

The report was then adopted, one hand only being held up against it.

SIR CHARLES HASTINGS said there was but one person whom they could make Chairman of the Directorate, and that person was Dr. Richardson; in whose zeal, ability, judgment, and strict integrity, he had the greatest confidence. He proposed—

"That Dr. Richardson be appointed Chairman of the Directorate."

Mr. DANIELL seconded the motion, and requested his name to be put down for five guineas at once, and for five guineas for every remaining five years of his life.

This motion also was carried.

Dr. CORMACK moved a resolution which he believed to be of considerable importance. It neither made nor recommended any alteration in the mode of forming the first Directorate; but it suggested that at a future time a modification of the constitution would be advisable, with a view to secure perfect sympathy between the members and the managers of the Fund. He therefore proposed—

"That the first Directorate be requested to consider carefully the question, whether it ought not to be necessary for each member of the Board, and each person entitled to vote at the election of members of the Board, to be a member of the Provident Fund."

Dr. BUDD (Clifton) seconded this resolution, which was carried unanimously.

#### PAPERS.

The following papers were read:—

7. A few Words on Bantingism. By C. B. Radcliffe, M.D. Lond.

Dr. ANDREW CLARK (London) expressed his agreement on the whole with Dr. Radcliffe; who, if he understood him rightly, maintained that the diet prescribed by Banting did not introduce as much carbon into the body as was necessary for the vital operations. Still there were other ways by which animal heat was made, besides the introduction of carbon. It was well known that the amount of hydro-carbon, in ordinary health, was insufficient to account for the amount of heat in the body. He thought the extra quantity was owing to the introduction of an amount of nitrogen which went undetected; and ammonia was formed and was expelled from the blood in large quantities.

Dr. BARHAM (Truro) said there was a cardinal fact which must be noticed—that the diet of Banting was simply a medicine for excess of fat; and on the principle of burning his own lamp, the animal heat required was supplied by the wasting of this superfluous fat. There was no doubt that Banting's system, whether the best of its kind or not, was a great curative agency.

8. Remarks on the Rinderpest or Cattle Plague: with Drawings of the Characteristic Alterations of the Intestinal Follicles. By W. Budd, M.D.

Dr. BUDD suggested the formation of a committee to inquire into the subject of infectious diseases.

Dr. THUDICHUM supported the proposal.

Dr. BARHAM moved—

"That the best thanks of the Association be given to Dr. William Budd for his able report, and the series of his previous inquiries; and that the Committee of Council be requested to take the requisite steps for carrying his recommendation into effect, by obtaining the cooperation of competent reporters on the several branches of the subject."

Dr. ANDREW CLARK seconded the motion, which was carried.

9. A New Instrument for the Treatment of Spinal Curvature. By Henry Dick, M.D. Dr. Dick exhibited and described the instrument.

The Fifth General Meeting of the Association was held in the Senate House, on Friday, at 4 P.M., Dr. PAGER in the chair during the earlier part of the proceedings, and subsequently Dr. BURROWS.

#### THE ADDRESS IN SURGERY.

Was read by G. M. HUMPHRY, M.D., F.R.S. It is published at page 175.

Mr. TURNER (Manchester) moved—

"That the cordial thanks of this Association be given to Dr. Humphry for his very able and interesting address."

He thought that no eloquence or oratory was necessary to recommend this resolution to attention and approbation; for he believed that all that had been intended for this address to be, it had been. The object of an address was to give a review of the past twelve months' history of a subject. He was pleased beyond measure with Dr. Humphry's address, for a more connected and useful view of the whole subject on which it treated could not well be conceived; he had concentrated much into it, and he (Mr. Turner) would remind the meeting that concentration was much more difficult than amplification.

Mr. SOLLY (London) seconded the motion. He felt proud of Dr. Humphry as a member of their profession; he had taught them and enlightened them, and had shewn them that eloquence was not confined to other professions and excluded from the medical. They would permit him to say that this address shewed how much the metropolis and the provinces ought to be linked together, for the talents of such a man as Dr. Humphry ought not to be confined to so

limited a field of operation as the University of Cambridge. [Applause.]

The motion was carried by acclamation.

## PAPERS.

The following papers were read.

On Diphtheria. By John Bridger, Esq.

New Researches on the Pathology of the Blood. By B. W. Richardson, M.D.

## VOTES OF THANKS.

SIR CHARLES HASTINGS moved—

"That the cordial thanks of this meeting be given to the Vice-Chancellor and Senate of the University, for their kindness and liberality in granting the use of the Senate House and Arts School for the business of the Association."

The motion was seconded by Dr. STOKES (Liverpool) and unanimously carried.

Dr. STEWART moved—

"That the cordial thanks of this meeting be given to the Master and Fellows of Gonville and Caius College and to the Master, Professors, and Fellows of Downing College, and to the other Colleges, for the splendid hospitality which they have accorded the members of the Association."

He said: This resolution speaks for itself. It records rightly the splendid hospitality which has been shewn to the Association, collectively and individually, by the University and the different colleges—a hospitality which could not be surpassed. In reference to our meeting here, I venture only to remark, that it is well for our Association, which moves in the atmosphere of the nineteenth century, and has had but a brief, though a vigorous existence, to link itself to the venerable past in the noble old seats of English learning. To have met here, in Cambridge, imparts a dignity and an importance to our proceedings, which it is difficult to over-estimate, and which cannot fail to exercise a powerful influence on the future progress and the scientific tone of the British Medical Association.

Dr. GIBBON, in seconding the motion, said he could but look upon the hospitality they had received at Cambridge as an earnest that this great, ancient, and learned University would for the future give more encouragement to the medical profession; and he hoped to see the day when Fellowships and Scholarships would be given as the rewards of merit in that profession. [Hear, hear.]

The motion was unanimously carried.

The GENERAL SECRETARY proposed—

"That the sincere thanks of the meeting be given to Dr. Latham, the local secretary, and to the local committee, for the admirable arrangements which have been made for the reception of the Association." No one could have any idea of what Dr. Latham had gone through during the last two months.

Sir CHARLES HASTINGS seconded the motion, and it was carried.

Dr. RICHARDSON moved the thanks of the meeting to their excellent President, Dr. Paget. They could not but remember the admirable classical address he had given them, and the excellent way in which he had conducted the business.

Mr. HECKSTALL SMITH seconded the motion, which was carried unanimously.

The meeting then dissolved.

## UNREAD PAPERS.

The following papers and contributions were placed on the programme, but were not read on account of the absence of the authors, and from other causes.

Injuries of the Head. By Sydney Jones, M.B.

Herniotomy without opening the Sac. By T. H. Barker, M.D.

Some Questions in Reference to the Nourishment of the Working Classes. By Edward Smith, M.D., F.R.S.

The Collection of Minor Medical Observations. By A. Ransome, M.B. (Received for publication.)

Tracheotomy in Croup and Diphtheria. By G. Buchanan, M.D. (Received for publication.)

Diphtheria. By T. Hillier, M.D. (Received for publication.)

The Nature, Varieties, and Treatment of Eczema. By E. Wilson, Esq., F.R.S. (Received for publication.)

Occipital and Constitutional Impetigo of the Scalp. By Balmanno Squire, M.B.

Neuralgia. By E. Woakes, M.D.

Intussusception. By G. Philipson, M.D.

A new point in the Pathology of the Skin, in its relations to Albuminuria and some Disorders of the Nervous System. By A. Clark, M.D.

Some points in the Treatment of Diabetes. By F. E. Anstie, M.D. (Received for publication.)

The beneficial effects of Venesection in cases of Convulsions occurring with Albuminuria after Scarlet Fever. By M. Foster, Esq.

## THE DINNER.

At which 120 members and visitors were present, was held in the magnificent hall of Gonville and Caius College. Dr. PAGET, President, occupied the chair; having on his right the Vice-Chancellor of the University, Sir Charles Hastings, the Mayor of Cambridge, Dr. Thorp, the Provost of King's College, Dr. Vose, and the President of Queen's; and on his left the Bishop of Ely, Dr. Burrows, the Dean of Ely, Dr. Acland, Professor Selwyn, Dr. Jeaffreson, and Mr. Solly. Among the guests present were, also, the Rev. E. H. Perowne, Professor Challis, Professor W. H. Miller, Professor Liveing, etc.

The CHAIRMAN gave "The Queen", which was warmly received, and drunk standing.

The CHAIRMAN next gave "The Prince and Princess of Wales and the rest of the Royal Family". He thought that all good folks must be pleased that among the first acts of the Prince of Wales was the laying of the first stone of the new wing of a hospital; and that only on the previous Monday, his Royal Highness took a long journey to lay the foundation-stone of a monumental cross in memory of the medical officers of the army, who died in discharge of their duty in the Crimea. [Cheers.] As to the Princess of Wales, we knew that the mere sight of her made loyalty more loyal. Nor, in drinking this toast, must they forget the baby Prince; might he grow up to become a true English gentleman like his father, and a winner of all hearts like his mother. [Cheers.]

The toast was duly honoured.

The CHAIRMAN next gave "The Army, Navy, and Volunteers". As regarded this toast, he had some little difficulty; for he had inquired, and had not been able to ascertain whether there were any one present to represent the army and navy. Surely there must be present some one who represented the medical departments of these services; one who was, as Dr. Humphry had said that day—

"πολλῶν ἀντάξιος ἑλλων."

He (Dr. Paget) quite agreed with the old sentiment—there was very much in it. Experience proved that one of the most important things to an army was keeping it in good health. Sick men can't fight. Campaigns are as often decided by fever and dysentery as by the sword. Science applied to warfare must tell in sanitary measures as certainly as in gun-making. He hoped, therefore, that if there were any gentlemen present belonging to either service, they would stand up, and, as they had been charged with the care of their health elsewhere,



they would answer for their health there. With regard to the volunteers there was no difficulty. They had among them a senior officer—a captain: he meant Captain Professor Liveing. He coupled Professor Liveing's name with the toast with more pleasure, because he was a representative man: he thoroughly represented the public spirit of the volunteers. Though his engagements were more than sufficient to occupy any ordinary man, yet he found time to attend to his military duties with the punctuality of a veteran. [*Cheers.*]

Captain Professor LIVEING responded to the toast.

The CHAIRMAN next gave the health of the Bishop and Clergy of the Diocese. The Bishop of Ely had come from London that day on purpose to be present at their meeting. They ought to remember that, in the middle ages, medicine owed its revival to the clergy, as Dr. Humphry had told them; and that the school of Salerno, which was the first to become famous as a school of medicine, was originally a Benedictine convent. And it often happened that these clerical doctors were very handsomely rewarded for their services, not only with wealth, but sometimes even with the highest ecclesiastical dignities. One of them was raised successively to the positions of archbishop, cardinal, and pope. Happily and wisely, the clerical and medical offices are now disunited. To preach the gospel and to heal the sick are now separate missions. But it would always be borne in mind that they had one common bond of union, for they are but parts of one Divine command.

The BISHOP OF ELY, on behalf of himself and the clergy, had to return their very hearty thanks for their kindness in responding to the last toast. He heartily concurred with all that Dr. Paget had said about the union of medical skill with clerical work. They were met together here in this great University, in which, perhaps, more than in any other place, physical science had been united to a profession of the Christian faith; and he hoped and trusted the union might never be dissolved. [*Applause.*] He could but remember that that noble college had produced Harvey, the discoverer of the circulation of the blood, and Jeremy Taylor, one of the most eminent of Christian divines; their portraits hung from the walls of this hall, equally honoured. In this University, he was happy to say, there had never been a division between science and religion: the greatest of men, who ranked eminently in the sciences, were zealous for the faith. He might mention Bacon or Newton in a bygone day; Airy, Whewell, Stokes, Adams, or Miller, in the present. The first men in physical science of their day had been equally devoted to the religion of their fathers and to the truth of the gospel; and though in this day there was some misunderstanding between science and faith, yet he had no fear for the issue. [*Cheers.*] He fervently trusted that they of a scientific profession would follow out their pursuits with success, and at the same time allow them (the clergy) to follow out their spiritual labours. He had no fear of an increase of knowledge: the danger rather was in having too little of it. [*Applause.*] The medical profession and the clerical had the same commission to carry out. The one ministered to men's bodily wants, the other to their spiritual; the one to the sufferings of the body, the other to sin and the sufferings of the soul; and he (Bishop Browne) was most anxious to testify that, during his lengthy ministerial experience, he had ever found the greatest comfort and the greatest assistance from the medical men in the parishes with which he had been connected. The bishop concluded by again returning thanks for himself and the clergy of the diocese.

Dr. PAGET said that it now became his duty to propose "Prosperity to the British Medical Association." [*Loud cheering.*] Its aims are to promote medical science and to maintain the honour of the profession. These are aims that deserve success—that deserve the

good wishes, not of the medical profession only, but of all men. For what household was there into which sickness had ever entered, that did not feel an interest in the advancement of medical science and in the honour and integrity of the profession? [*Hear, hear.*] There were various ways in which this Association accomplished its purpose: they most of them knew how it worked, but there was one feature about it which peculiarly struck him, and it was this—that it kept alive, by its migrations to and fro and by its branch meetings, a love of medical science which all must have imbibed during their student life, but which was liable to languish among men who were scattered through the country or isolated in villages, and so cut off from the stimulus and sympathy of kindred tastes. In influencing men thus situated it did good service to the men themselves, and to the cause of medical science, causing the men to observe and record facts and reflect upon them, and to add to the general stock of science while improving themselves. It should be borne in mind, that from rural practitioners had come the greatest boons to mankind in modern times—it was a rural practitioner who discovered vaccination [*Cheers.*] But beyond these considerations, this Association was of service in that it brought them all together in good fellowship [*hear, hear*]; it kept up some feeling of brotherhood among workers in a good cause, and bestowed upon them many advantages, pleasures, and happinesses. The great Harvey, in his will, enjoined that at the London College of Physicians there should be every month a cold collation to be frequented by the Fellows, the purpose of which was, he believed, expressed in the words—"to keep love among the brethren." And Dr. Caius, one of the founders of this College, directed the Masters and Fellows of the College to keep good cheer and to entertain some friends both on the day of his birth and on the day of his death; and, however the type of other things may have changed since those bygone days, yet all would agree with him that there had been no change in men's social feelings. [*Hear, hear.*] Here Sir Charles Hastings was in the midst of founders: he, they rejoiced to see, in vigorous flesh and blood: they (the other founders) in effigy, perhaps also in spirit; for if the spirits of the departed ever revisit the scenes of earth, doubtless those of Gonville and Caius were those present among them. Let them hope that Sir Charles Hastings might long live to enjoy and witness the prosperity of this Association and the good he had himself done in his generation—and might he rejoice in that which is the peculiar and enviable glory of a founder, that he has extended his power of doing good beyond the limits of his own lifetime. He begged to propose prosperity to the British Medical Association, coupling with the toast the name of Sir Charles Hastings. [*Loud and protracted cheering.*]

Sir CHARLES HASTINGS said that on these occasions he was so impressed with the enthusiastic manner in which his poor services were recognised, that he really found it difficult to give expression to his feelings. He would, therefore, briefly say that deeply and from the bottom of his heart he thanked them, and he thanked Dr. Paget especially, for having so kindly spoken of him. The progress of this Association had far exceeded his most sanguine expectations, though those expectations had been very sanguine, and though he looked forward to its progress being even yet more rapid, yet thirty years ago he had no perception of the perfection to which they would attain, in promoting the love of medical science in the three kingdoms. Those who could look back to thirty years ago could remember that it was generally taken for granted that all the strength of the medical profession lay within six miles from the General Post Office—then there was nothing in common between the metropolis and the provinces. But one of the great objects of this Association was to unite the metropolitan

and the country practitioners in one brotherhood. Their meeting in London was a complete success: there their brethren from the country were received with open arms, and it was through the instrumentality of this Association, he believed, that the present good feeling between the town and country practitioners existed, and he himself could but look back with satisfaction at his having aided, in the humblest and smallest degree, in bringing this about. [*Cheers.*] Their meeting first in one part of the kingdom and then in another, gave them an influence in the various localities which they might otherwise in vain seek to obtain; and he thought it was the crowning effort of this Association that it had been so warmly received by all the authorities when it met within the walls of this ancient University. [*Loud Applause.*] He could but say that the way in which the Vice-Chancellor and the various colleges had come forward and wished them God speed, was most grateful to all their feelings, and must give a great impetus to their future progress. It must be known to those he was addressing that for a quarter of a century the Association had had a longing desire to visit this University—for a quarter of a century they had been wooing the authorities, and at last they had won them. [*Laughter.*] The University had set its seal, as it were, upon their proceedings, and had shown them that it desired the progress of medical science and of all those objects for which such an Association as this was formed. In congratulating themselves on the past, they must remember that the future was in their own hands; though he himself had no fear, for he looked upon what they had already accomplished as a guarantee that their future progress would be equally successful with their past. Their meeting in this University had been one of those things which would strengthen their hands; and therefore, in conclusion, he would only say that he saw before them a vast and unclouded prospect. [*Loud Applause.*]

MR. JAMES PAGET, in proposing the University of Cambridge and the health of the Vice-Chancellor, said: I owe the honour of being permitted to propose the next toast to a great personal disadvantage; for the toast is, the Vice-Chancellor and the University of Cambridge, and it is thought right that this should be proposed by one who is not a member of any University at all, as if envy could commend the object of its desire better than love can praise its best possessions. I speak of envy, for I am sure that none of you who have not been members of such an University as this which you have been admiring can have failed to feel as I did, when I first began to teach in a medical school, envious of those who teach here; and this, not only for the opportunities of having all sciences taught, as it were, within one fence, but for the yet greater advantages of social life, and discipline, and the constant presence of the symbols and services of religion. It was my privilege, some twenty years ago, to inaugurate an imitation of the collegiate system at Saint Bartholomew's Hospital. It has worked well, and has answered all our reasonable expectations. But it is yet too small, and too much alone; for no other of the medical schools has yet followed our example. It would be a great improvement in the schemes of medical education, with which we all seem to be ill contented, if our schools were really colleges such as you see here. I still hope for the time when they may be so; but it must be far distant; unless, indeed, another Caius should arise and gather both the wealth and the wisdom for a foundation like to this. But it is not only in our medical relations that we may envy or honour Cambridge: as Englishmen, we owe her yet much higher honour. For there is no form of knowledge which this University has not cultivated or trained men into fitness to pursue. In divinity and laws, in history and literature, in every branch of science, Cambridge men have ever been among the leading spirits of their age, chief workers among those of whose labours we reap the fruits. And not only so; but among our chief legislators and statesmen,

Cambridge has instructed many in the power and art of thinking; and has taught them, in lessons of submission, the first lessons in the art of governing. These are a cloud of witnesses who, while England has a history, will bear testimony in honour of the University. But there is yet another debt, perhaps in its total greater, which England owes to Cambridge; that she has trained so large a body of our gentry and nobility, not only in fair learning, but in rectitude and mutual honour, in the love of order, in the love of freedom, in the love of home; and, in all these, on the foundation of the one true faith. When one thinks of these things, one's feelings rise to something more than even the heartiest good-will that can be expressed in the terms of any toast; the rise to an earnest prayer that God may grant to this great school of learning and of moral discipline a perpetual prosperity; so that, as long as England lasts, Cambridge may be a very garden of wisdom, rich in all the fruits of intellectual and moral culture, and a training ground for the far future generations of English gentlemen—clear-head, stout-hearted, loyal, and true. I can add to the pleasure with which you will receive the toast of "the University" by connecting with it the name of the Vice-Chancellor. You have seen him foremost in the ample and graceful hospitality with which the University has received the Association; foremost, therefore, among those to whom we owe our thanks. But we also owe him honour for his devotion to pursuits that are, in a measure, kindred with our own. Not content with very distinguished honours in the chief studies of the University, or with the election with general applause to the Mastership of his College, he has been a keen student of natural history. As an accomplished geologist, he has proved, what it is our privilege to be taught from the very beginning of our studies, that there is no better exercise for a strong and well-stored mind than may be found in the pursuit of natural science. I give, then, "Prosperity to the University, and health to him who so worthily represents it."

THE VICE-CHANCELLOR said he should always feel a difficulty in speaking in behalf of this University, but on the present occasion the difficulty was increased tenfold, after listening to a speech which he had never heard surpassed in eloquence. [*Applause.*] When a great national and distinguished association met within the walls of this ancient University, and so warmly and enthusiastically expressed itself towards the University, he hoped he might take that expression of good-will as something more than a mere compliment—as an admission on their part that they of the University were ready to hold out to them the right hand of fellowship, and willing to maintain those great objects which this Association was established to promote [*Cheers*], and as an acknowledgment that the University fully appreciated the great services which their noble profession had rendered to mankind. He trusted this University would always be ready to honour the sciences of medicine and surgery, and would look upon it as imperative on itself to show respect and regard to a great association like the present. [*Cheers.*] The occasion would justify him in making a few remarks with regard to this meeting. He congratulated them on being now assembled within a college which had so long been connected with the progress of medical science. It had been told them by his Lordship, that this was the college of the immortal Harvey; it was founded or enlarged by Dr. Caius, and took the lead now in the medical education of the University, numbering among its members, former Fellows of the college, some of the most distinguished ornaments of the medical profession; he need not name them, though he might call to their remembrance that the eminent physician who had been appointed President of their Association was a distinguished member of this college. [*Applause.*] Dr. Paget had for many years taken an active part in the general affairs of this University, and had devoted his talents and his abilities to



the promotion of many great public improvements, and to the carrying out of the objects of this noble foundation. He (the Vice-Chancellor), as a member of this University, begged to return to their President his most sincere thanks for the manner in which, in his opening address, he had laid before the Association the relation which the University bore to the medical profession, and the nature of the education which the University offered to her students; and for having pointed out to them the efforts which the authorities at Cambridge were now making to promote the study of the natural sciences. He (the Vice-Chancellor) hoped that able, elegant, and truly practical address might be given to the world in a separate and permanent form, and that the views there set forth might spread abroad through the length and breadth of the land. [*Cheers.*] He might express a trust and belief that the University would be alive to its duties in respect to the natural sciences, and, in addition to promoting the time-honoured studies of the place, would help forward those other sciences so closely connected with a profession of the utmost value to mankind. The Vice-Chancellor concluded by again thanking the company for the toast, and resumed his seat amid warm cheering.

Dr. DROSIER proposed the health of the Mayor, who had given them the use of the Guildhall.

The MAYOR briefly and suitably acknowledged the compliment.

Professor SELWYN, in proposing the next toast, said: My good friend, your President, my friend of thirty-seven years, has prescribed for me this evening. I always take his prescriptions in full confidence; they are not always the most pleasant to the taste, but I have found by experience that they are good. His prescription for this evening is, *Fiat locutio post prandium*. I cannot tell what good it may do me; at all events, I hope it will have the effect of inducing you to receive heartily the toast I have to propose: viz., "Health and prosperity to all the other Universities of the British Isles." The President has made me the organ by which Cambridge wishes the welfare of all her sister-Universities. And never was the word sister more justly applied; for, though our Universities are severed by long distances, and under different climes, yet we are all engaged in the same noble aims and pursuits, of advancing knowledge, and upholding truth:

"Facies non omnibus una,  
Nec diversa tamen, qualem debet esse sororum."

The first feeling, on having such a task prescribed, was of course to sink under it, and to wish for a better spokesman; and after hearing Homer quoted here this evening, I have been saying to myself, "O that Homer could be here among us!" for if he sang so fervently the praises of one single physician—*πολλῶν ἀντάξιός ἄλλων*—how eloquent would he have been under the influence of this great assembly of physicians, finding here Podalirius and Machaon, Burrows and Paget, and Budd and Acland, all gathered under one roof! But, after this feeling of despondency subsided, the next, I confess, was a feeling of encouragement and elevation of mind. To see around me so many of the most distinguished members of the family of Medici; so many men of highest attainments, all engaged in that noble art of healing, so closely allied with our own work as divines, could not fail to produce a great elevation of spirits. I feel my pulse beat quicker; I feel the circulation of the blood more rapid; I feel the spirit of Galen and Hippocrates rise within me. And how comfortable and joyous has been our meeting to-day! What a pleasure to sit down at table in company with so many physicians, all enjoying the good things provided for us by the College! What a contrast to poor Sancho Panza, in his Isle of Barataria, sitting down in solitary state, with one physician standing behind him, who waved his hand as each dainty dish appeared, and away it went, before he

could taste a morsel! With these pleasurable feelings, I ask you to drink health and prosperity to the other British Universities; and especially to the Medical Faculties; for upon them mainly depends the health of those Universities; and they have come hither, like the shower of August stars, to enliven our University amid the dulness of our long vacation. [*Cheers.*] I could say much, if time allowed, on the connexion of medicine with all our other branches of study; of its connexion with science, and with divinity, there is no need to speak: the physician and the divine are linked together, like body and soul. But, as to classics, it was a physician, Sir William Browne, who gave us gold medals for Greek and Latin odes; and to this draught of Helicon, he added two little pills of epigram, knowing that a good hearty laugh is very wholesome for the human frame. As to poetry, our Christian poet, John Keble, wrote a book of lectures on the medical power of poetry, showing that poetry was given from Heaven as a medicine of the soul, to soothe the troubled thoughts and feelings. As to history, you remember how Niebuhr, when writing his Roman history, said: "He who calls that which has vanished back into being, enjoys a bliss like that of creating." Is not this the very bliss enjoyed by the physician, calling back the vanished bloom of health to faded cheeks?

"Fondly we seek the dawning bloom  
On features wan and fair;  
The gazing eye no change can trace,  
But turn away a little space,  
Then look! and lo! 'tis there!"

This is the creative power recognised by the *fiat* of the physician: *Fiat mistura; fiat pilule*. [*Laughter.*] But when I speak of creating, you all know what I mean; not that man can really create, or originate anything. Neither we, the physicians of the soul, nor you, the physicians of the body, can ever arrogate to themselves any power like this; we can only apply the means which the bounty of God places in our reach. It is ours to apply the healing words; yours to apply the mineral or vegetable substance, "the lulling potion, or the healing root;" and God gives the blessing.

"Thine be the glory, gracious Lord  
Of every healing work and word;  
For every word and work is thine."

I am sorry that I cannot point to any representatives of Edinburgh and Dublin present here to-day; but one of our sister universities is well represented. Oxford has sent Dr. Acland, and a worthier representative she could not send—[*cheers*—one who, if he had no other claims to our cordial good wishes; if he had not been the chief agent in the institution of that noble museum; if he had not been the most zealous promoter of scientific studies; if he had not laboured to advance the study of anatomy first, and afterwards, as Regius Professor, the general study of medicine; would have earned our goodwill by two works, which will continue to promote the welfare of our country, long after we are laid in our graves; having watched over, and, under the divine blessing, preserved the health of our young prince during his travels in America; and having done his best to purify the rivers of England. Dr. Acland very boldly proclaimed the truth, that God did not make rivers to be used as drains; and let us hope that, in spite of the mountains of difficulty that still lie in the way, he will persevere and overcome them all, and restore the purity of our rivers throughout England. [*Cheers.*]

Professor ACLAND said that, after the magnificent speech—the speech full of eloquence and pathos, which had fallen from Mr. James Paget—he felt in some difficulty as to how he should respond to this toast. Setting aside the manner in which he had been personally received, and the manner in which the University of Oxford had been spoken of, he said he should be guilty of treachery towards those institutions with which the toast had been connected, if he did not make a few ob-

servations in responding. In the first place, he considered it a positive duty that he should appear and do homage to the University of Cambridge and to the Association there assembled, simply in the public capacity which he had the honour to fill. He (Dr. Acland) did not think that what Mr. Paget had stated (as no University man could have stated it) at all exaggerated the advantages of our English University education. [Hear.] Those who had had the privilege of enjoying this education incurred a great and a serious responsibility; but, this responsibility notwithstanding, he desired to see as many members of his profession coming to the Universities as possible, as there was no walk of life in which a preliminary liberal education was of greater service. [Loud applause.] He gave it as his opinion, holding a public office in one of these great institutions, that the greater the number of young men to be engaged in the noble art of healing who received a University education, the better. He could, therefore, heartily thank them in behalf of the other Universities of the land—he knew he could thank them on behalf of Oxford, for the best men there were determined to carry on a noble rivalry to Cambridge in affording the best and soundest education to her students. Dr. Acland concluded by admonishing those who received this education to turn it to the best account, and by expressing his desire that the Universities might be more than ever alive to forwarding such institutions as this Association.

The DEAN OF ELY said a toast had been put into his hands to propose. If there was one lesson which the clergy learned from the laity, it was the lesson of being very brief; and if any additional reason was required for his being so on the present occasion, he found it in the fact that he had a return-ticket to Ely for the mail train, and that it now wanted not many minutes to eleven o'clock. If, therefore, he made a long speech, in all probability he would be rewarded by missing his train. He should say but few words; and in this he had a great advantage, for the toast put into his hands was one of which he knew nothing in the world. [Laughter.] He had to propose the health of the General Medical Council. Now what the General Medical Council was he did not know, except that he regarded it as something similar to what they in the Church called Convocation—a sort of institution to apply mild restoratives to medical heretics; “for,” added Dr. Goodwin, “if we in the Church have our *Essays and Reviews*, pray have not you your homœopaths?” [Laughter.] However, there was coupled with the toast the name of a gentleman whom he ought to know, for he had sat next to him during dinner, and therefore on that account alone he was, perhaps, bound to propose his health. He was thinking of the old question, “What is the difference between a bishop and a dean?” “Dr. Burrows” seemed to be a fitting answer to the question. (Dr. Burrows was sitting between the two worthy ecclesiastics, and the Dean’s remark created a roar.) In coupling Dr. Burrows’s name with the toast, however, he did so with especial pleasure, because he was proud to recognise in him an old Caius man, and a man who stood nearly at the head of his profession. After facetiously alluding to his own immunity from anything which would require the physician’s art, the Dean said he had always felt ashamed of the divinity of his College—it seemed to have worn itself out with Jeremy Taylor; but, in the way of medical science, he was quite satisfied with it. The Dean concluded by proposing “The General Medical Council, and Dr. Burrows.”

Dr. BURROWS responded. He thanked first the Dean for his complimentary speech, and then the meeting for the manner in which they had expressed their sentiments towards the General Medical Council, though he was well aware that that Council had not done all that had been expected of it in the way of remedying the evils existing in the profession. It was quite true that the

Medical Council had fallen short of what was expected of it; but if gentlemen would call to mind the time at which the Council was appointed, and the circumstances under which it was constituted, they would see that, in the very nature of things, difficulties must arise to impair its efficiency. Let them call to remembrance, when the English, Scotch, and Irish were first represented in one Parliament, how difficult it was for them to act. The same sort of difficulties appertained to this Council. They had at the board men of eminence in the various localities from which they came, and having fixed but often widely differing opinions on most points. How unreasonable was it to expect men so differing to pull together with one united action! It was this fact, that the Council was so constituted, that in a great measure accounted for its having hitherto done so little. For his part, he would never have been induced to occupy his present position as President of that Council, except solely with a view to the good of the profession. It was no personal advantage—no small thing of that kind—which made him accept the invitation offered to him; and they might rest assured that, so far as he was concerned, he would ever work for the benefit of the profession. Of course, they could not now expect him to commit himself to opinions, though they would excuse him saying that he should always endeavour to conduct the business in no partisan spirit. They might expect him to express an opinion about medical education; but he felt that it would be better for him to be silent on this topic also. Dr. Burrows concluded by expressing his pleasure at meeting the Association in that hall, and in a college of which both the President and himself were old members.

Dr. RICHARDSON remarked, in proposing the next toast, that the first prize ever given by the Association had been awarded to Dr. Thudichum, a well known member of this Association, whose health he now begged to propose. He remembered the time when Dr. Thudichum first came to England. He came as a foreigner, knowing our language but imperfectly, but full of promise and full of great hopes; and, during the time he had been among us, he had acquired a knowledge of our language such as was possessed by few of ourselves. He (Dr. Richardson), as one of the adjudicators of the prize, said the researches of Dr. Thudichum would be read with the utmost pleasure by the members of the profession. [Cheers.]

Dr. RADCLIFFE HALL proposed the health of the President for the year. [Loud cheers.] He was sure they could not have met with a better President; for they had in him not merely one fitted for the office, but a man who was really one of them. They would all drink with the greatest appreciation Dr. Paget’s health. [Renewed cheers.]

Dr. PAGET thanked them heartily for their kindness, not only in drinking his health, but in making him President; and for their extreme indulgence in looking over his shortcomings whilst he was in office.

Mr. SOUTHAM proposed the health of the readers of the addresses—Dr. Ormerod and Dr. Humphry. He was sure it was not necessary for him to enter into any eulogium of these gentlemen’s merits. He had not himself the pleasure of listening to Dr. Ormerod, but he had heard Dr. Humphry; and of the address of the latter, he might say that, whether they looked upon it from a practical point of view, or as pointing out to them the medical education to be derived from the University, he was entitled to their warmest thanks. Mr. Southam suggested that some of the resident Fellows should give themselves to studying one or other of the natural sciences; and advised them, when on the continent, to visit some of the smaller universities, and witness the amount of good that had been done in them by persons who had thus devoted themselves to science. As an illustration of this, he mentioned especially the



late Professor Schröder van der Kolk of Utrecht, whose admirable physiological and pathological museum has been shared between the Universities of Oxford and Cambridge. If this suggestion were acted upon, he thought additional lustre might be added to the name of Cambridge.

Dr. HUMPHRY: On behalf of Dr. Ormerod as well as myself, I beg to return you our cordial thanks for this unmistakable expression of your kind feeling towards us. I regret that the duty of replying to it, of representing both medicine and surgery, has devolved upon me. Fellow-students in former times, friends then, friends ever since, Dr. Ormerod and myself have rejoiced lately in being fellow-labourers in the attempt to promote the objects of the Association and the success of this meeting. If in that we have, to some extent, succeeded, we have had our reward; and this meed of your approbation is so much surplus gratification to us. I look back upon this meeting, now nearly closed, with unmixed satisfaction; it will remain stamped upon my memory as one of the most enjoyed periods of my life. I have made numerous acquaintances with men whose names were by-words among us; and I now know them, not merely by their good works, but personally. I cannot think that the effect of this meeting will be merely ephemeral. I trust it will produce, among other lasting influences, that of a better knowledge of Cambridge in our profession, and a stronger yearning towards her. A gentleman has just said to me, "I wish I had known Cambridge before; I would have sent here my two sons, who have been brought up to the profession; but I knew nothing and thought nothing of the university." Henceforth you will know more and I hope think more of her. You cannot have been here for a few days—a few hours, you cannot have strolled in these classic groves, have rested in these halls saturated with learning and teeming with hospitality; you cannot have attended together that noble service in that noble building, without acquiring something of the genius of the place, without some impression having been made, some kindly feeling excited. You may have been led to think more and more humbly, and therefore more rightly, of the great problem impressed upon us in that service, "Where shall wisdom be found? and where is the place of understanding?" It is no small privilege to have been here for this short time. You will judge, therefore, that I am not insensible to the very great privilege of being a resident here. I am well aware that my lot has fallen upon most fair ground. With privilege, I know, is ever associated responsibility; and I am, and always have been, deeply sensible that to my privilege of living here is attached the responsibility of endeavouring to extend to others of my profession—to those especially who are about to enter it—some of that which I so highly prize myself, to urge you and others to give to the future members of our profession the opportunity of sharing this cornucopia of mental and material wealth. I love my profession; I love my University; and am most anxious to promote a closer union between them, being convinced that such union must be for the welfare of both. Gentlemen, I repudiate altogether the idea that the University is for the physician alone. The University is for the surgeon. The University is for the general practitioner. The University is for all to whom high education, clear thought, and noble resolve are of value. It is with this feeling, to promote this end, that I have laboured long, and at length, I am glad to say, successfully, to bring about this meeting; and I trust, indeed I feel sure, that the effect of the meeting will not be confined to the pleasure which you, I believe, have experienced in coming here, and to the very great pleasure which, I am sure, we have had in receiving and welcoming you. I anticipate from it effects stretching far into the future, effects productive of much good to our profession, and so to our country.

Mr. BARTLETT proposed the readers of papers, enlignising those of Dr. Routh, Dr. Richardson, and Dr. Budd. With the toast, he coupled the latter gentleman's name, thanking him for the diligence and patience he had given to the study of the causes of contagious diseases.

Dr. BUDD, in returning thanks, said it was a peculiar gratification to him to attend this meeting in the University of Cambridge. He had not the honour, and he deeply deplored it every day of his life, of being a member of one of the Universities; though some of his brothers and near relatives owed to the education and the endowments of this University everything that had helped forward their advance in life. Still he loved and revered the place, and he could say that the little mathematics he had picked up in a hap-hazard sort of way, in a country village, from his brothers when they came home for their vacations, had been of inestimable value to him. He had again and again thought that it was in the highest degree desirable that there should be a closer educational union between the medical profession and the Universities, for he had long held the opinion that the present training for their profession was wanting in that teaching of precise and accurate habits which distinguished our Universities. If one profession more than another required a sound and rigid preliminary education, it was the medical profession, for they needed minds accustomed to thought and to that system of logical induction which enabled them to appreciate in a scientific manner the phenomena which came before them. Dr. Budd, having further pointed out the great need the profession had to be more closely associated with the Universities, resumed his seat amid hearty cheering.

The health of the President-elect was next warmly given and received, and Dr. JEAFFERSON shortly and suitably responded.

Dr. STEWART proposed the health of a gentleman to whom they were very much indebted—Dr. P. W. Latham, the local Secretary. [*Loud cheers.*] The duties of local Secretary were as arduous as could be performed, and Dr. Latham had been unsparing in his energy. The toast was received with as much enthusiasm as any that was drunk during the whole evening.

Dr. LATHAM said he would be affecting a modesty he did not feel, if he said his labours had been light, though he was amply repaid by the kind manner in which he had been received, and by the many hearty congratulations he had received on the success of the meeting. He should always look back with pleasure to the circumstance of his having held this office. He thanked the meeting for the expression of their feeling.

The CHAIRMAN now left the chair, and thus the meeting of the British Medical Association in 1864 terminated.

We cannot draw our report to a close, without expressing our deep obligation to Dr. P. W. Latham, the indefatigable local Secretary, for the courtesy with which he rendered every assistance and information to the gentleman who prepared this report.

PEPSINE FROM THE PANCREAS. Dr. CORVISART removed the pancreas from a man who died suddenly after inhaling chloroform, cut it into small pieces, and shook them up with four hundred grammes of cold distilled water. After filtration, one portion of this liquor was rendered slightly acid with hydrochloric acid; another portion was made alkaline with potash, and the third part was left as it was. The digestive power of each was then tested with fibrine and albumen, the mixture being kept at about 104° Fahr., and in every case the digestion was rapidly effected. (*Chem. News.*)

## OPERATION DAYS AT THE HOSPITALS.

|              |  |
|--------------|--|
| MONDAY.....  | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| TUESDAY....  | Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| WEDNESDAY... | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.   |
| THURSDAY.... | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| FRIDAY.....  | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY.... | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

THURSDAY. Zoological Society.

## TO CORRESPONDENTS.

\* All letters and communications for the JOURNAL to be addressed to the Editor, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

J. W.—The leader referred to by our correspondent concerning the late election of Fellows, excited the indignation of every Fellow of the College of Physicians, except, of course, of that Fellow who communicated the information to the *Lancet*.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Messrs. Clarke and Elliott, London, 10s.; 10d. Hall, Esq., (Olverstone), 10s.; Geo. Bulmer, Esq., (Leeds), 10s.; W. A. Barr, Esq., (Slough), 10s. 6d.; Thos. Robinson, Esq., (Cheadle), 2s. 6d.; Joseph Toynbee, Esq., (Savile Row), £1.1.; Francis Davies, Esq., (Pershore), £1.1. Amount previously announced, £48.3. Received at the *Lancet* office, £3.11. 1 ann, etc. ROBERT FOWLER, M.D., Treasurer and Hon. Sec.

145, Bishopsgate Street Without, August 10th, 1864.

COMMUNICATIONS have been received from:—Dr. WILLIAM BIRD; Dr. RANSOME; Mr. FREEMAN; Dr. G. M. HUMPHRY; Mr. LAWSON; Mr. T. M. STONE; Rev. H. BROMFIELD; Dr. ROUTH; Mr. BRIDGER; Mr. E. WILSON; Dr. ANSELL; Dr. HILLIER; THE SECRETARY OF THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH; Mr. I. HARRISON; Dr. FOWLER; Dr. G. BUCHANAN; Mr. SANSON; Mr. H. HANSON; Mr. LEED; and Mr. LANGLEY.

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# Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### BIRMINGHAM GENERAL HOSPITAL.

HEMIPLEGIA, WITH LOSS OF SPEECH.

Cases under the care of JAMES RUSSELL, M.D.

[Continued from page 85.]

#### *Hemiplegia of the Left Side.*

CASE XXIV. Male, aged 57. Illness was preceded by much complaint of weariness gradually increasing, with impaired power of left lower extremity, the commencement of which appears to date three weeks ago, and had made great advance in three days. "His speech has not been observed to be affected until the day before yesterday"; this is the sole reference to articulation throughout the case, with one exception, though from the descriptions frequently entered into of specific complaints, and from frequent mention of "wandering," it is evident that the faculty of speech was preserved. Had now complete paralysis of the left arm—incomplete of the leg; sensation blunted; special senses entire; "speech a little affected." Face weakened on the left side; tongue deviated a little. An aortic bellows-sound was audible.

He lived three months and a fortnight; at first there was some effort to regain power in the leg, but this soon ceased to be made; and from the language employed, I infer that the right side of the body was thought enfeebled to some extent; some rigidity appears to have existed in the extensors of the left leg during a considerable part of the case, but at its close, the flexors of the arms on the same side also became rigid. Sensibility did not vary from its first condition in the affected limbs, but the patient suffered from much pain in all his limbs ("in the bones"), and in the joints; he said that the pain in the left leg and foot was like sticking knitting needles into these parts. Hyperesthesia then affected the entire surface of the body, so much so, as with the pain in the limbs and joints in moving, to cause him to resist the needful cleaning; the paralysed leg grew so sensitive (though the patient could not exactly localise the point of contact), that it was difficult to test the reflex sensibility, which, however, did not appear much exalted. The legs emaciated equally. His urine was at times passed unconsciously, and constantly so in the last month or three weeks. He wandered at times, and had much frontal headache.

SECTIO CADAVERIC. The right hemisphere of the brain consisted of a large ragged cavity thinly covered by cerebral tissue, having for its floor the parts forming the floor of the lateral ventricle. The enclosing portion of brain seemed firm and healthy. The corpus striatum and thalamus appeared healthy. The base of the brain and the opposite hemisphere were also healthy. The arteries at the base were healthy, excepting that some of the smaller branches were rigid. Earthy degeneration had taken place in the aortic valves. The cells of the liver and of the kidneys contained fat—those of the former, in very large quantities.

CASE XXV. Female, aged 77. Seen four hours after an attack of left hemiplegia; she was "quite unable to speak," though apparently sensible, as when asked if she were in pain, she put her hand to her forehead. "She appears to have retained the power of speech

some time after losing the use of her left side"; she was carried upstairs perfectly helpless, and only spoke once again, saying, "it is another stroke".

She suffered from hemiplegia of the right side four years ago; "the right arm has remained feeble ever since, and her speech a little drawing," but she walked as well as ever. She died in three days; she was supposed to continue conscious for twenty-four hours; afterwards she became quite insensible and unable to swallow.

SECTIO CADAVERIC. Heart nearly healthy. A large clot in the right hemisphere of the brain on a level with the ventricle, occupying in longitudinal direction, about the middle third; it approached close to the ventricle without entering it, but had made for itself a passage to the surface of the brain. A cyst in the left hemisphere was filled with a mesh work of cellular tissue; it was on a level with the ventricle, "but quite clear of that cavity"; it passed perpendicularly downwards for the depth of half an inch.

CASE XXVI. Male, aged 39. "An attack of hemiplegia" some time before the present seizure, from which he speedily recovered. This second attack produced complete paralysis of the left limbs, extinguishing all reflex movements; though sensibility was not evidently affected. There was no deviation of the tongue, "and speech, after the first shock had subsided, was only slightly affected." Consciousness was nearly entire. He lived a week. The *post mortem* was necessarily imperfect. An old apoplectic cyst in the left optic thalamus; the white matter covering the right thalamus was rather soft, and the outer part of the thalamus and corpus striatum was rather soft, the softening implicating the contiguous substance of the hemisphere. The right anterior meningeal artery was obstructed by fibrine; an accident had destroyed the remaining vessels of that side, but those on the opposite side were healthy. The mitral valve was greatly contracted by adhesion of its flaps; the aortic valves were thickened.

CASE XXVII. Male, aged 68. Symptoms of failure of nervous power for three years, with slight attacks of impairment of muscular strength; then incomplete left hemiplegia with mental confusion, followed speedily by stupor and involuntary evacuations. On the following day I found that he used the left arm more easily. "On awaking, which he did readily (he was asleep at my visit), he looked about him, put out his tongue when told, replied to inquiries, but was not sensible of his situation, and did not know us"; his tongue did not deviate. On the next day the report is; "replies readily, and if the answers required be brief, quite collectedly; but when attempting a long reply, the train of his ideas is interrupted; in replying, an effort is apparent before he begins." He took up things said and commented on them, but was unable to carry on any lengthened conversation.

He died six months afterwards, immediately after an attack of general convulsions. He improved after his original attack, but never fully recovered. In three months after my attendance had ceased, he had again complete paralysis of the same (the left) side; I only heard of him, and my note is, that he is reported to be quite intelligent. In four weeks afterwards, a similar attack again occurred without insensibility, "only confusing him"; and in the afternoon of the same day he suffered from several paroxysms of severe convulsions, "but retained his consciousness so completely, that when able to articulate (*i.e.*, probably in the intervals of the convulsions) he described his attack as one of convulsion."

Convulsive seizures were renewed, accompanied by perfect unconsciousness; but the description of his condition necessarily implies that the power of speech

and his mental faculties were retained, though he was liable to forget events of recent occurrence. The left arm remained permanently paralysed to a considerable extent.

CASE XXVIII. Male, of middle age; very intemperate. "Twelve weeks ago he fell down with left hemiplegia and *partial paralysis of the right arm*," but without insensibility." The right arm speedily recovered; the left very gradually, and considerable paralysis remained with impaired power over the sphincters. The left arm had wasted. Urine was healthy. The only reference made to articulation is that at my second visit, on the tenth day after my first, "his speech was still thick."

CASE XXIX. Male, aged 64; temperate. He describes a feebleness in the left arm and leg, with numbness and some impairment of the grasp by the hand. Sensibility is slightly impaired. Memory is also somewhat enfeebled. The attack came on suddenly seven weeks ago; it was not accompanied by vertigo nor by headache. His speech was never in the least affected, nor was he sensible of any change in his tongue; no deviation is present now. In addition to some lessening of muscular power in the arm, the left side of the face is slightly but decidedly feeble, so that he has lost the power of whistling. His radial arteries are tortuous and morbidly firm; there is no arcus senilis. The first sound of his heart is feeble. His urine is healthy.

CASE XXX. Male, aged 59; temperate. Failure of memory had been noticed for a year, and for six months diminution of intelligence; for four months some want of power in expelling his urine. Left hemiplegia took place gradually, during the week preceding his admission. He is described as being perfectly "ready" in his answers, but his articulation is once noted as "slipshod." There was loss of power over the left hand, and impaired sensibility in the leg of the same side; his control over his stools was not perfect. The sounds of his heart were clear. His gums presented a lead line. His mental energy rapidly lessened; he became torpid, and his speech more indistinct; he said, "I can hardly pull my words out." The right side was apparently unaffected throughout.

CASE XXXI. Male, aged 66. The day before his admission, he had an attack of insensibility, lasting some hours, which left him paralysed in his left arm. As he recovered his consciousness he began to talk, "saying, he 'must have a candle to go to bed.'" The power of each arm was found impaired, and most that of the right. "He answers questions without fully articulating." There was no deviation of the tongue. The further report of the case is very meagre.

CASE XXXII. Female, aged about 60; probably of rather intemperate habits. She suddenly "felt queer," and in trying to go to the bell fell, and found that she had sustained partial loss of power in the limbs of the left side, with numbness of the right side of the face, and impaired articulation. She retained consciousness perfectly. In an hour and a half when I visited her, she could almost stand unaided; she talked plainly, and only some numbness remained in the right side of the face. Next morning recovery was complete, excepting a little vertigo.

CASE XXXIII. Male, aged 20. He had a fit when three months old, and it was repeated on each of the two following days; epileptic fits have continued to recur ever since. The first fit left him hemiplegic on his left side, and he was unable to walk until he was three years old. He began to talk when 18 months old. Partial paralysis remains in his left arm and leg, with imperfect control over the contraction of their muscles. The respiratory muscles of the left side

also act imperfectly. His memory is enfeebled. No wasting of the muscles. Articulation quite unaffected.

CASE XXXIV. Male, aged 55; temperate. He had suffered from symptoms of cardiac disease for three months, and from severe pain in the right side of his head for two months. He had a sudden attack apparently of cardiac apnoea nine months ago. Two days before admission he fell insensible; the attack was preceded, during six weeks, by "startings" over his whole body, but particularly in his right side, by internal squint in his right eye, and by stumbling. The insensibility lasted a quarter of an hour; it left him with left hemiplegia and speechless, and his articulation was imperfect for the day. He had complete paralysis of the left arm, imperfect paralysis of the leg, with some rigidity; his tongue deviated to the left; there was also some paralysis of the left buccinator and of the left side of his mouth. The patient's memory was also slightly affected. No further allusion is made to articulation through the report. There was a double aortic bellows sound. Urine was free from albumen. The patient had been injured by severe accidents, and had been bled repeatedly for cardiac symptoms.

CASE XXXV. Female, aged 45. During the last three years she had suffered from three attacks of left hemiplegia of a doubtful character; she was partially insensible after the first, for two months; after the second, for five days; she did not perfectly lose consciousness in the third, which happened a fortnight ago, but it left her speech rather indistinct, and it remained so. A fourth attack occurred the night before admission, asserted to have been accompanied by insensibility. Throughout the period mentioned, she had suffered from vertigo and from headache on the left side. She presented a history of excessive anxiety and harsh usage, with one attempt at suicide apparently in a state of mania. The attack before entering the hospital was followed by feebleness of each foot; the grasp with the left hand was feeble; there was some "indolence in raising each foot" in walking. Her articulation was slightly thick. Her vision had been imperfect for three years; she had had to sit very close at her needle, and had lived badly. The ophthalmoscope shewed some atrophy of the optic discs. Her menstruation was very irregular.

CASE XXXVI. Female, aged 36. Presents partial paralysis in the left upper and lower extremity, with some rigidity, easily overcome, of the flexors of the wrist. Muscular development is perfect. The paralysis came on two years ago, after violent hysteric fits, which continued to recur. The paralysis, which is plainly hysterical, was accompanied by numbness of the tongue and loss of speech for a fortnight. The whole history of the attack as of the patient's present symptoms, is full of hysteric developments, and without any evidence of organic disease.

CASE XXXVII. Male, aged 48; very intemperate. He presented evidence of arterial disease, and had had gout repeatedly. Eight weeks before admission, he was taken with imperfect left hemiplegia, without insensibility, and five weeks afterwards, he had a slight return of the paralysis. At his admission, some remains of the paralysis were observed. His urine was albuminous. No reference is made to articulation; but I distinctly remember that it was perfect whilst he was under observation, as I took, personally, a very long account of his habits as a drinker.

CASE XXXVIII. Female, aged 24. Eight months ago she had a sudden attack of insensibility, lasting half an hour, in which the "mouth was drawn to the right side"; it was followed by sleep, and she was then found affected with hemiplegia of the left side;



there is distinctly some paralytic affection of the right leg involved in the history of the seizure, but her recollection of the circumstances is not sufficiently clear to afford accurate information on the point, save that the right leg "remained weak, after the left leg had been affected." Some paralysis remains in the left arm, with diminished bulk of the muscles. She remained in bed four days, and when she got up she continued to drag the left leg. No reference is made throughout to articulation. The sounds of her heart were healthy.

CASE XXXIX. Female, aged 42. Attacked with sudden left hemiplegia eleven weeks ago; the arm remains considerably paralysed. No reference is made to the subject of articulation; but from the report, which is very brief (she seems only to have attended once), it is inferred that she told her own story.

[To be continued.]

## Original Communications.

### ON RETENTION OF URINE, PUNCTURE OF THE BLADDER, AND PERINEAL SECTION.

By THOMAS PAGET, Esq., Leicester.

SINCE the paper I read to the Midland Branch Association at its June meeting in 1859, and which was published in the BRITISH MEDICAL JOURNAL of July 2nd of that year, I have met with two other cases of impracticable stricture, and they have been similarly treated to those there reported; namely, by simple paracentesis vesicæ above the pubes, and with a permanent tube for micturition: one with like success; the other in too advanced a state of sinking to be more than eased by the operation.

Before entering upon the facts of the present cases, I may say that the former ones are still under my eye. The first patient, now aged 82, is to be seen in his walks, but little further aged in looks by the last five years, firm in his step, and ready in address; the other is as well as at last report, allowing for five years having passed over him.

CASE I. The first case I have now to name fell under my notice, in conjunction with Messrs. Cooper and Sidley, in March 1862. Mr. H., aged 71, had suffered from obstruction to the flow of his urine for some years, latterly increasing until entire retention had existed since February 27th; and we could not pass the catheter. At times a stillicidium occurred, but the bladder remained tensely full.

March 2nd. Mr. Cooper punctured the bladder above the pubes, fixing the cannula by elastic cord, in the way named for the former cases.

March 12th. The patient has continued relieved, and without any bad symptom. To-day the silver cannula was removed; and a shorter flexible one, of elastic gum, with silver shield, was readily substituted and fixed.

June 30th, 1864. Without anything untoward, he got about as soon as could reasonably be expected, and now walks as well as legs stiffened by gouty interfibrous deposit will carry him. He says he makes some water by the urethra, but for no consideration would part with his tube.

Mr. Cooper tells me that both his cases prefer short silver tubes to the flexible ones, and that the shields have plugs worked with fine screws to stop them.

CASE II. May 22nd, 1864. The subject of the second new case is Mr. J. W. W., who has experienced difficulty in micturition since a hurt in the perineum, re-

ceived by his horse falling with and upon him in the year 1824. He has received occasionally temporary relief from dilatation; but since the death of a relative two or three years ago, who was his surgeon, his stricture has gone on increasing, and now the urethra allows only of very gradual micturition, affected by almost constant and nearly unconscious dribbling. The abdomen is, and has been, I am told, for the last six weeks, occupied up to above the pubes by a tense tumour of the bladder. He has two sinuses in *perineo*, surrounded by indurated swelling; is frequently troubled with vomiting; the legs are cedematous; and the pulse 110 to 120.

Under these circumstances, immediate relief to his bladder offers the sole chance for life; and the shock of a severe and protracted operation like the perineal section would add much to the peril of his situation. With the sanction and aid, therefore, of Mr. Shackelford of Husband's Bosworth and Mr. Cox of Welford, I this day (22nd) introduced the trocar above the pubes, filling one chamber-pot full to within an inch, a second up two-thirds from the bottom. The cannula was fixed in by elastic cord; the abdominal tumour wholly disappeared; and we left the patient in high appreciation of the relief he had gained. He, however, sank, and died on June 10th; I am told, from gradually increasing debility, and without any return of pain.

By the result of the four cases, the continuance of the first two in health and activity to so late a period of life, the present course of the third, and the fact that the fourth could not with a shadow of prudence have been submitted to any severe operation, I am convinced that tapping above the pubes, and micturition afterwards by a short tube regulated by plug or screw stopper, is for a patient past sixty years of age, and perhaps for others, a far better course of treatment than perineal section, though certainly not so glorious for an aspiring operator.

## Transactions of Branches.

### WEST SOMERSET BRANCH.

#### PRESIDENT'S ADDRESS.

By J. HAMILTON KINGLAKE, M.D., Taunton.

[Delivered, July 6th, 1864.]

GENTLEMEN,—My first desire, on taking this chair, is to give expression to the regret we all feel at the loss of our much respected President, Mr. Collyns. I had not the privilege of his acquaintance; and am, therefore, debarred from speaking of him in the terms that friendship would dictate. The fact, however, of his having retained through half a century the affectionate regard of the people among whom he dwelt, is in itself an eulogy that would be spoiled by the addition of mere words of praise.

I now turn to the more cheering duty of thanking you most cordially for the honour you have done me, in calling on me to preside over your affairs during the ensuing year. A duty of another kind also devolves upon me. I have to speak the prologue, as it were, to the scientific proceedings of the day; and therefore it is, that I claim a small portion of your time, as well as a large measure of your indulgence.

It would hardly be fitting in me (seeing that the task has been so frequently accomplished, but never perhaps so ably as by our reigning President, Dr. Symonds), to advert in any but the most general way to the objects which the British Medical Association professes to embrace, or to the many services it has already rendered to medicine.

It is sufficient to know, and to have it re-told, that this Association, like all other societies (whether artificially constituted or existing naturally, as in many divisions of the animal kingdom), has arisen from the sense of individual weakness, and the conscious inability to carry out, single-handed, any of the great purposes of life; and that now this same Association, through the systematic combination of the members of our profession, has become a Power which enables us to stand by our order in times both of oppression and of adversity; whilst, by bringing observing and thoughtful minds into communion, it has taken the best possible means of gathering up such of the scattered facts bearing upon medicine, as would otherwise be wholly lost to our art. And, in truth, medicine needs to be thus continually reinforced from without; seeing that it cannot, in the nature of things, secure for itself, as yet, that solid foundation which would enable it to attain the precision which is claimed for those arts that hinge on mathematical or other equally unquestioned truths.

But, although few of the fundamental truths to which medicine is linked have, as yet, been revealed to us, it is clear that they are involved in, or form part of, the great science of life; and hence the task of bringing them to light, as well as of making out the pedigree (so to speak) of the class of facts constituting the branch of knowledge which we call medicine, and so tracing them back to their parent source, must rest with the physiologist; who, recognising at once the imperfection, yet perfectibility, of his science, might so work out the problem set to his hand, as to cause it to be shown that life, health, and disease, are but phenomena arising out of the varied working of one force common to the whole organic world.

But until such time shall arrive, the physician who is true to his mission must be content to work by the imperfect light that is vouchsafed to him. He must endure, moreover, to see the provisional laws, that have sufficed to regulate his treatment of disease to-day, supplanted to-morrow by others, it may be, of larger import, as the materials for a broader generalisation crowd in and compel such displacement. He must rest satisfied with the possession of moveable facts, so to speak, rather than all-enduring truths. He must take many things on trust; and welcome as precious gifts the collected experience of others in the treatment of disease. The British Medical Association, in recognition of the necessity that exists for thus strengthening our hands for immediate conflict with disease, invites its members (without waiting for the physiologist to set out the foundation on which they may be based) to bring in the choice observations and experiences of the year; to try their quality by the searching test of discussion; and to apply the results so obtained to the better treatment of disease. Such being, as I take it, the general objects of the Association, is there, in addition thereto, any special purpose which a district Branch, such as this, is called upon to fulfil? I conceive that there is.

Without entering into the ethical part of the question, further than to acknowledge the advantage that results to the profession from the opportunities afforded to its members of keeping their friendships in repair at these annual gatherings, I would at once state that I consider the special aims of a district Branch should be these: 1, to recognise and delineate the diseases that appear to be indigenous or peculiar to the neighbourhood; and 2, to note the modifications that disease in general assumes, from the influence of the local climate, food, and occupation of the people.

In regard to the first of these subjects of inquiry, I am not aware that West Somerset can lay claim to

having any one disease under its special protection, in the sense that Derbyshire (to take a single instance) claims goitre for its own. But, if our division of the county is exempt from any characteristic malady, it is, nevertheless, certain that its climate, in common with that of the more western counties, tends to lower nervous power, to relax the energies, and to blunt the sense of life; and if these be the effects on the inhabitants of a district in their ordinary state of health, may it not be inferred that a like enervating character will be imprinted on diseased states of the body, requiring a corresponding modification of the treatment directed to them? The confirmation or rejection of this inference comes within the range of what I take to be the proper functions of this Branch. But it has yet other work before it in the same direction.

It should determine how far this climate is favourable to the existence of the whole class of nervous diseases: whether epileptic and neuralgic affections, for instance, do not find here a more congenial *habitat* than would be afforded them in a climate of a different character; and if so, to what element or circumstances constituting the local climate these effects are to be ascribed.

In regard to the occupation of the great bulk of the people in this district, looking to that as a possible element concerned in imparting a character to disease, we find that they are engaged mainly in agricultural labour; an employment which, looked at *per se*, must be accounted as exercising a favourable influence on the health; but the good so attained brings in its train the evils of low wages, confined dwellings, and a diet in which animal food—more particularly in the shape of milk and butter—forms a very inconsiderable ingredient.

How far the prevalence of tubercular affections among the agricultural poor in this neighbourhood may be ascribed to the airless rooms in which they sleep, and to the small proportion of oleaginous food supplied to them during the periods of their active growth, is a question that waits on your individual observation for a solution. Certain it is, however, that the out-of-door life of the agricultural labourer is not, in itself, sufficient to outweigh the evil influences (whatever they may be) that contribute to the development of the tubercular diathesis.

Rheumatism is, also, a disease which attains considerable prevalence in this neighbourhood. For this visitation, the chronic use of the ordinary drink of the country, cider, has been hitherto held responsible. I do not join in this condemnation. I am disposed to think that the tendency to form and retain in the system an excess of lactic acid (on which rheumatism is thought to depend), may be better ascribed firstly to the too exclusive ingestion by the poorer classes of farinaceous food; and, secondly, to the diluted condition of the oxygen, as it exists in our humid atmosphere, whereby that portion of the lactic acid destined to be broken up is suffered, through lack of oxidation, to retain too long its chemical integrity, and thus to accumulate injuriously in the blood.

Ague is another disease which has not altogether lost its hold in this district. The low lands around Bridgewater and Langport still furnish their annual contribution of cases; but I am not aware that the disease itself presents any peculiarity, to warrant more than a passing allusion to the fact of its continued existence among us.

This very cursory glance at the diseases that may be said to find here a congenial soil for their development, would fail of its object, without adverting to the maladies that seem to be here, also, "conspicuous by their absence." I think I might say that cal-



culous affections are almost unknown in this county; whilst the comparative freedom from other diseases associated with lithic acid deposits, points to some circumstances in the food of our people, or in the properties of their accustomed drink, which is not shared by those living in the Eastern counties, for instance, where we know that calculus and its allied disorders abundantly flourish.

I have a strong suspicion that the immunity to which I have referred, may be attributed (to some extent at least) to the fact, that cider is much more generally drunk in this county than malt liquor; and I am strengthened in the view I have thus formed, by noting the influence which, according to my experience, cider possesses, of correcting various morbid states associated seemingly with the arthritic diathesis.

Had I been addressing you in any previous year, I think I might have also claimed for this district a comparative exemption from the class of zymotic diseases; but the severe and fatal outbreak of scarlatina that occurred last autumn, especially in the Quantock country, coupled with the valuable statistical report of our associate, Mr. Cornish, as to the mortality in Taunton, both from scarlet and typhoid fever, take away the ground for any such exemption.

It is true, that we shared this pestilence with other parts of England; but it is seldom that an epidemic visitation of this kind has fallen on our neighbourhood with the full force of its virulence, as it has done on the occasion in question.

How far the outbreaks referred to are traceable (as regards the intensity of their character and the wideness of their diffusion) to the unusual heat and dryness of the last summer; whereby a more than ordinary amount of decomposing organic matter may have been suffered to contaminate the drinking-water, or to accumulate in the atmosphere surrounding the infested places, instead of being swept away into the neighbouring streams; or may have been washed out of the air and resolved into more elemental forms by the ozone-bearing thunder-storms of an ordinary July; is a matter which those gentlemen who may have had the best opportunity of watching such epidemics may investigate with advantage, aided by the light that the Registrar-General (if I mistake not) has supplied, as to the superior healthfulness of wet as compared with dry summers.

I fear, however, that many of you who may have been led to join with Dr. Christison in divorcing morbid poisons from their old allies, bad smells, might be indisposed to pursue the line of inquiry I have suggested; inasmuch as it might be held to imply a backward step in our endeavour to arrive at the true etiology of zymotic diseases.

Assuming, however, that fever-poisons and the foul odours arising from decomposing organic matter are not necessarily joined together, does it follow that these emanations play no other part (so far as fevers are concerned), than that of depressing the general health, and thus favouring the operation of fever-poisons on the system?

I do not think that the mass of evidence that has, from time to time, been adduced in support of the alleged influence of organic emanations in determining zymotic diseases, can be thus summarily ignored; and I consider that we are not called upon, without further investigation, to acquit foul air of the credit it has hitherto enjoyed of being, more or less directly, concerned in the causation of these specific maladies. At all events, pending inquiry directed to this subject, we may well rest on the provisional theory which regards organic emanations as the favourite breeding grounds (so to speak) of those low typed organisms that are thought to constitute the class of

zymotic poisons; and to continue in the belief, until otherwise assured, that, where those emanations are not evolved, or, being evolved, are straightway rendered innocuous through the process of ozonisation, there will these organisms be found to multiply most sparingly, and zymotic diseases (provided the bodily receptivity be the same) be reduced to their minimum spreading power.

You will perceive that, in touching on such of the foregoing subjects as relate to the climate of the place, I have been merely using them as finger-posts, as it were, to point the way to what has hitherto been a comparatively unexplored region in the domain of medicine. It is reserved for you to go in and possess yourselves of the promised land.

But, gentlemen, you will probably say, that the contributions I ask you to make to the medical climatology of the neighbourhood, with the view of enriching our art, will involve an amount of time and labour you can ill afford to bestow. You may say, also, and with truth, "We cannot live on the bread alone that science provides. We have been retained on behalf of suffering humanity, to apply our days, and may be our nights, our talents, and our active sympathies, to the alleviation of bodily misery; and we require in the exchange something more than the approbation of our own consciences, and the conviction that we have done some service to our art. We require in the interest of the same suffering humanity, that the art we practise—an art that has been built up through nearly three thousand years, by the never ceasing work of observing and thoughtful minds—should be placed in its proper niche among the higher departments of knowledge; and that we, as its ministers, sharing in that elevation, should have our position duly recognised, and be entitled to receive a just return for the brain-capital we have invested in this branch of industry."

I will not go into the many questions suggested by this possible remark. It is sufficient to state, that the position in which medicine is held, and will continue to be held by the public, would seem to depend, first, on the character of those who profess and practise our art; and secondly, on the balance-sheet we are enabled to exhibit of the results of our treatment of disease. The outside public will judge us, as well as the art we practise, by the fruits it brings forth. They will respect our calling and appreciate our sagacity, so long as we are successful in our cases; and as surely will they invest our failures to cure with more or less of the discredit that attaches to professional ignorance, or to the following of a wrong scent in the field of knowledge, without stopping to recognise the element of uncertainty inherent in our craft, and which, if taken into the account, would go materially to qualify either verdict.

I am not one of those who believe that this unfair mode of judging of a confessedly uncertain art can be corrected by force of popular instruction in "the Rudiments of Physiology" and the "Elements of Domestic Medicine", or that the public can be thereby educated into an appreciation of the true value of medicine, or taught the duties they owe to the profession. On the contrary, I am inclined to hold to the opinion that, in order to secure a fair hearing for our profession, we must look to the general education and enlightenment of the popular mind, rather than to its special instruction in the alphabet of our art; and this conclusion is supported by what we must all have observed, that men of the most enlarged minds and comprehensive views, are those who are the least disposed to question our usefulness, the most tolerant of our wrong guessings, the most ready to recognise our deserts, and the most forbearing in those periods of humiliation, when we have to stand as mere specta-

tors in face of sufferings we have no power to alleviate, or of the death we cannot postpone.

How comes it, then, that, notwithstanding the *prestige* accruing to our art, from its having gained (as we have given reasons for believing it has already gained) the acceptance of wise and enlightened men, it should nevertheless carry along with it an atmosphere of distrust, and be tainted with the leaven of a false and irrational empiricism? Does it not, in a measure, arise from this, that the mass of mankind (having instinctively a greater faith in the resources of medicine than the physician himself) are apt, when they find their extravagant confidence in remedies unseparated by those to whom they naturally look for re-inforcing their convictions—are apt then, I say, to discredit a system which is trusted least, as they might allege, by those who must know it best?

And if this be the conclusion arrived at by the unthinking masses, what more natural than there should arise a constant transference of allegiance, from a system that is not ashamed to confess its fallibility, to other modes of cure that minister to the unreasoning belief that every disease has its remedy, and that the promise to cure implies the possession of the means?

But, gentlemen, we who have prepared the way for this disaffection, by daring to question the power we use, need not wonder at this secession from the true faith. We should remember, also, that, as a craving for the sensational, and a love of the mysterious, are properties of the infantine or undeveloped mind, so will there always be those who, in the matter of medicine, will prefer being supplied with new and attractive dogmas, promising the attainment of health and long life on the easiest and most agreeable terms, to the unsatisfying diet of hopes and fears with which a conscientious physician of the true faith has too often to sustain the much tried confidence of his patient.

Let us not, however, in our laudable endeavours to check this following after false lights by those who find it an easy process to put aside their reason at the bidding of a stronger will, fall into the mistake of martyring the propounders of the heresy, or of elevating its doctrines to the rank of a contending art; but rather take our stand on this, that the medicine we profess, inasmuch as it claims to represent the application of physiological truths to the healing of disease, must necessarily prevail against all rival systems not similarly linked to accepted truths. And, even though our calling be challenged by other alleged modes of cure that appeal to the passion of credulity on the one hand, or to the strong instincts of self-preservation on the other, it is not charlatanism such as these that can tarnish the true metal or obstruct the onward progress of an art which, rooted in the infirmities of our nature, and marching with our civilisation (supplementing in its course the deficient life force that civilisation engenders), is destined to reach a foremost place among those other applications of verified and all enduring principles that have already served to promote the welfare and happiness of mankind.

Gentlemen, I have detained you too long from entering upon the more important business of the day; but I cannot conclude without referring for one moment, by way of anticipation, to the contributions towards the medical history of the past year that will be furnished by this Branch of the Association.

It is true, that the materials of this history are not yet before us; but I have reason to believe they will be of a character that will do honour to the parent stock from which we spring. In the domain of surgery, we shall have to congratulate Mr. William

Liddon on having won his spurs in the difficult field of ovariotomy; and, I doubt not, we shall have to thank other gentlemen for the valuable additions they will bring to the literature both of physic and surgery.

## METROPOLITAN COUNTIES BRANCH.

### PRESIDENT'S ADDRESS.

By CHARLES F. J. LOED, Esq., Hampstead.

[Delivered July 14th. 1864.]

As your President, the honour and responsibility of addressing you become now the most important, and, I assure you, to me, the most onerous part of my duty. While I thank you most heartily for the honour you have conferred on me by electing me to a chair that has been filled by so many of my distinguished colleagues, I cannot but fear that you may have erred in your estimate of my ability to succeed to their office, and to do justice to them as well as to you.

The objects of the British Medical Association are twofold. We have it laid down for us by our rules, and as our first canon, that we are to uphold the art and science of our common profession, and equally to sustain its moral character, its dignity, and its social polity. This Branch has had the privilege of selecting its first officer each year from among men, some of whom have been the representatives of one or other of these principles in their highest development; while it has even had the good fortune to have had as presidents those who have represented both to the fullest possible degree. From me, expect no claim to mastery in the sciences and the arts; but take me as I am, as one who has been devoted through a long professional career to honest work—to the direct administration to the needs of suffering humanity, and to the earnest and persistent endeavour to sustain the social position, the moral character, and the dignity of our order, in all their integrity.

In considering the subjects that I should bring to your notice to-day, I have been embarrassed with the variety of the materials presented. The difficulty of selection I have solved by cutting the Gordian knot, and determining to confine myself, in the main, to those points which have most significantly engaged the attention of the Branch.

The report of the retiring Council has brought under review, perhaps most prominently, that which has been effected in relation to the Army Medical Service; but I may say, as an observer rather than an actor, that the mere report affords but a faint idea of that which really has been done. The spirit of our late associate, Dr. McWilliam, has evidently not ceased to animate our councils. It reminds us still of what has been conceded to the sister service, the navy; and it bids us push on in hope. I think I may say we have done all that could be done. To those who have not carefully followed the arguments on the army medical question, I may state briefly, that the labours of the Branch have been directed to three great objects—1. To obtain for our brethren in the army the same social position as belongs to the other officers; 2. To secure for them increased pay, earlier retirement on pension, and advantages during sickness which they have now in but a limited degree, as compared with their combatant colleagues; 3. To remove from their office certain duties which, as they are now conducted, are considered degrading to the position of the profession, and opposed to the broad and holy character of its humanity. Whether we have or have not made way, a few months must determine; and, from my own observation as to



what occurred at the deputations to the Secretary of State for War, to the Commander-in-Chief, and to the Director-General, I can assure the Branch that every grievance has been faithfully placed before the highest authorities; that the causes for the decline of professional appreciation of the service have been fully explained to the Government; and that if, in any crisis, English soldiers should die, not from the enemy, but from the want of English surgeons, the profession may safely appeal to the public as innocent of so great a calamity. Meanwhile, this is no time for resting. We have spoken to the Government, and may speak to it again; but we must also speak to the people through our *press*, and through our influence in our daily communications with all around us. By these means, there is not a member of either house of the legislature who may not be reached, and to whose mind clear and correct views on the subject may not be brought home.

The question of gratuitous medical services has naturally attracted notice. This, the most delicate of all our internal disputes, has been dealt with, at all events, unhesitatingly, honestly, and ably, by Dr. Gibbon, in this Branch; and by Dr. Markham, to whose able and vigorous editorship we are so much indebted, in the columns of our JOURNAL. If they have committed any fault, it is, perhaps—if such can be a fault—that they have been too unhesitating in their honesty; that they have allowed certain plausible arguments, which depend for their strength on details, to pass, answered only by a broad opposition, which, though strictly true, may be considered too sweeping to carry with it immediate conviction, or to uproot a system which had its origin in the days of the Pilgrim Fathers, which was once a religion, then a superstition, and now an exorcism. I am one who would even to some extent respect superstitions, and would not remove too roughly the exorcisms which mark the stem of old Time; but I am bound to say that, in my opinion, the day has come when this particular exorcism requires removal—gradual, if you please, but decisive. The evils of it are fatal. It fosters, under the name of charity, that which is not charity; it often makes the wealthy ostentatious, and the poor improvident and exacting; and it sows among the profession a seed as poisonous as it is fruitful. That is not, and never will be, a good system, which teaches the newly fledged professional man the policy of establishing himself in a position above his fellows, by founding a reputation on a practice without reward, which practice, if it were not gratuitous, must and would be distributed remuneratively among the profession altogether. Neither, on a comprehensive view, can it be so important for the advancement of science as is alleged; because, if the first requirements of the art become concentrated in the hands of a few, the same requirements must necessarily slip from the hands of the many; and the public must, in the mass, suffer proportionally, seeing that, after every effort, only a small section of the public can possibly on any occasion experience the skill of the few.

But beyond this, granting a necessity for a superior class, having a special experience gained under public service, and for the real purposes of charity, I feel that such service would be in no way deteriorated by the fact that it was *paid for*. No one will assume that the labours of the medical officers of the endowed hospitals are less valuable, or less beneficent, or less scientific, or less appreciated, than those which are rendered without remuneration in other hospitals; and, therefore, it is folly to imagine that mere gratuitous aid is the soul of professional honour and charity. In plain English, the bugbear of *gratuity* is the pride of class in the presence of poverty.

It is one of the shows and shams of assumed professional superiority; and, if it rise sometimes into real superiority, such rise is so individual in its character, that it is gained at too great a cost to the whole body, being founded on a principle that is false to the whole. Let me be understood as uttering no word against distinctions among the profession, obtained by devotion to any particular branch of our science. Such distinctions must be, and will be, so long as the constitutions of men differ in regard to originality and power. I object, not to the development of these distinctions in the abstract, but to their development in a way detrimental to the interests of the profession at large.

Lastly, on this point, it must never be forgotten that, according to English law, every person in England is provided with medical services, and that in a way which, however indifferently remunerative, is still remunerative to the medical man. It requires, in fact, but an improvement in the Poor-law medical service to allow to nearly every man the fullest scope for his intellectual activity, without any loss of a pecuniary nature. This applies to the very poorest class of patients—to those who cannot help themselves. For the rest, they ought to help themselves by self-organisation, certainly not by the reckless expenditure of professional labour.

The mention of Poor-law medical relief leads me to notice briefly the present position of the Poor-law question. It is now, I think, twenty-seven years since the subject was actively agitated by a member of this Branch, who, I am happy to say, is still among us—Dr. Webster; and subsequently by another member of the Association, whose death is fresh in our memories, and to whose worth I cannot pay too affectionate a tribute—Mr. Peter Martin of Reigate. These gentlemen, with Dr. Hodgkin and many others, toiled laboriously with me; though, I regret to say, with small advantage. At last, the heat and burden of the struggle fell on Mr. Griffin, who, undaunted and always hopeful, has continued the effort, with the result, within the last few weeks, of obtaining a recommendation from the Select Committee of Poor Relief to Boards of Guardians that quinine and cod-liver oil should be supplied at the public cost; and that the tenure of office should be permanent. It is true that “half a loaf is better than no bread”; and we cannot, therefore, say that all our labours have been fruitless; and perhaps some will tell us that, like Sancho Panza, we “should not look the gift horse in the mouth”. But, after all, the concession carries with it no satisfaction to the true medical reformer. It indicates a logical and keen reasoning on the part of the Poor-law Board; but it indicates also a childish reasoning and a culpably foolish proceeding on the part of the body medical. The eagerness with which men seek for office is, in truth, as it always has been, the great bar to the redress sought for. From the Government we can expect nothing more, until the pressure of the want of medical officers has enforced the necessity of further change. I think that this change will be effected, perhaps without further agitation; and therefore I do not at this time commend the special consideration of the question to the Branch. The fact is, that at present the decrease in the numbers of the profession, taking such decrease side by side with the increase of population, is probably near five hundred a year, or a fortieth of the whole medical body in England and Wales. As, therefore, there is no probability that, so long as the present examination for entrance into the profession is so arduous, this decrease will cease, there must ultimately be a greater demand for medical officers in all the services, with an equal demand on the part of the profession for an increased remuneration.

Another point to which I would ask your attention has reference to the benevolent and provident efforts within our own ranks. Thanks to the exertions of the founder of the Medical Benevolent Fund, Mr. Newnham, whose name cannot be mentioned without feelings allied to veneration, and thanks also to Mr. Toyabee, the Treasurer of the Fund, we have a means of affording relief to our distressed brethren, second in its working, if not in its resources, to none. This Fund makes no display; asks for no public thanks; takes no thanks save those which come spontaneously from the relieved; and requires nothing but hearty support to be among the first of our charities. Let me suggest that the members of this Branch should show solicitude for the Fund by setting the example of nominating a small standing committee for increasing the resources of this important department.

"Deus juvat, qui se ipsum juvat"; and I should be failing in my duty if I did not mention shortly the great plan, which was laid last year before the Bristol meeting by our associate Dr. Richardson, for founding a Provident Fund in connexion with our body. It would not become me to forestall the Report of the Committee appointed at Bristol, which Report will be read at the Cambridge meeting; but the Chairman of the Committee, Dr. Richardson, tells me that there is every hope the plan will be carried out; that the basis of the undertaking has been fully agreed upon; that accurate calculations will be forthcoming; and that, if the Association be in earnest, the design will be an eminent success. As President of this Branch, the Provident Fund will naturally call for my strict attention; and I shall wait with full reliance for your zealous cooperation for assisting me during the ensuing year, should the Cambridge meeting, in its wisdom, think it right to establish the Fund as a part of our organisation.

I said, at the beginning of this address, that I claimed no mastery in the science and art of medicine; but, in forty years' experience of medical life, I have been forced to learn many things, and I have observed changes which fall to the lot of but few. I cannot conclude without congratulating the profession on the advancement which, in spite of many obstacles, little popular appreciation, and still less popular sympathy, has been made. I have lived to see the once obscure class of chest-affections rendered so intelligible, that the eye may almost be said to see what the ear listens to. I have lived to see chemistry directly applied to the investigation, not only of disease, but of the phenomena of life. The microscope in this time has made a new science, has unravelled healthy structures, and discovered diseased structures. The ophthalmoscope and the laryngoscope have, if I may use the expression, anatomised the living organs without the scalpel; and the beneficent discovery of the application of anaesthetics has divested the operating-room of those horrors against which the earlier student of surgery had so resolutely to "hold his heart". Then, there have been successfully performed operations which, forty years ago, madness itself would not have ventured on—I refer especially to ovariectomy; while the operation of crushing stone, which I once heard denounced as "ingenious, but impracticable," has reached a degree of perfection which is marvellous. Turning to the insane, we have seen an entire transformation in their treatment. Chains and straight-waistcoats are become forgotten; brute force has melted into loving-kindness; and the asylum has ceased to be a prison. In what is now called "sanitary science", there has been presented to us a department of medicine which is entirely new. This, but little fa-

voured by those whom it most concerns—the people—and supported for years by the unselfish and unaided efforts of medical men, has at last secured the attention of all our governing bodies, central and municipal. This science has become a practice of itself, presenting results which are absolutely startling when viewed in their comprehensiveness. In this great work, the names of Snow, McWilliam, Southwood Smith, are before us—their labours their best monument: their future lies in a history yet to be written. In pathology, means have been given us for interpreting some of the most obscure phenomena through the doctrine of remote and reflex irritation. Diseased conditions of the blood have undergone revision; and various forms of sudden death, the cause of which was not even dreamed of, have been explained by the great advances that have been made in regard to the separation and deposition of fibrine in the heart and vessels during life. Lastly, in the application—I may say discovery—of the process of synthesis in the investigation of such diseases as diabetes, epilepsy, rheumatism, uræmia, and cataract, there has been opened a field of knowledge which promises more than any other to bring medicine into the pale of the exact sciences.

In recording thus cursorily these immense strides, which I have followed without being associated with them as a discoverer, I cannot let pass the opportunity of saying how proud I am to feel and know that the major part of them have been made by our own countrymen, and some by men whom I have had the honour to enrol on my list of friends. Nor can I observe without regret a fashion, far too prevalent among English writers, to overlook the claims of their own country, and to describe as coming from abroad that which has been discovered at home. We ought to value every new thing that is good, and our *amor patriæ* should never blind us to the merits of our neighbours; but, after all, the *amor patriæ* should so prevail as to make us just to all our brethren.

I shall trespass on your time but a little longer. Yet, if I might be allowed, there is one suggestion which, as an old practitioner, I would make to our energetic discoverers. It is, that, having advanced diagnosis and pathology to such a degree, they should now turn their attention more exclusively to the investigation of the treatment of disease. It is a fact, that now we often know too much and too well, in comparison with what we can do. It is a fact that, when we are agreed in diagnosis, we differ in the most lamentable manner respecting the remedy. In many cases, we must always feel at a loss; but it cannot be sound, that, in cases of the most ordinary kind, we should exhibit such marked difference as to our methods of cure. Fixed principles on this point—nay, approximative principles—would do more to establish the confidence of the public in ourselves, and to abolish quackery, than all the laws on the statute-book. Nor can we ever hope to be the right worthy and well trusted of the nation till this grand object is attained. As a body, we are disinterested, benevolent, laborious, learned, and useful in our ministration; but we are not exact; we are not consistent. "Nullâ in re homines propius Deos accedunt quam salutem hominibus dando." This should be, after all, the object of our ambition—the end and aim of all our works—to give health to the sick; and this, I am sure, may be our achievement, if our labours be continued as they have commenced, and, based as they are, be directed to the perfection of the art of prescribing, with certainty attached to the act.

When Nelson had just laid down his life for his country, a group of sailors were conversing on the fore-castle of the *Victory*. Said one, "Poor fellow!"



Said another, "I hope he has gone to Heaven." A resolute old boatswain replied, "Why, in course he is. I should like to know who ever kept him from getting where he had set his heart on going." Let us remember this simple and graphic exposition of the secret of success of the great admiral. Let us feel that we can go where we have set our hearts on going, and do what we have set our hearts on doing; then, by another and a better Power than Fate, we shall see our noblest aspirations realised, and our expectations of to-day will be the facts of to-morrow.

## READING BRANCH.

### PRESIDENT'S ADDRESS.

By I. HARRISON, F.R.C.S., Reading.

[Delivered July 20, 1864.]

IN preparing an address, suitable to the occasion on which I now have the honour of presiding, a somewhat unusual course has probably been taken. I have not attempted to crowd everything and something more into one brief hour; but have endeavoured to state my own observations and convictions, and to draw inferences therefrom.

It must never be forgotten that each individual sees things from his own point of view, and observes them through a different medium. This point is infinitely varied by education, opportunities, and natural bias.

It is well, then, at these gatherings, that the orator should slightly sketch that which strikes him most from his own point of observation. From the teeming field of medical communications, discussions, and occurrences, selection is not an easy task. I shall avoid detail as much as possible, and touch only on those subjects which have arrested my attention and found a place in my note-book. Such an address must necessarily be fragmentary; but not on that account, I trust, less interesting and acceptable.

Anatomical discoveries of any magnitude can, in these days, scarcely be looked for. Mr. Turner, of the University of Edinburgh, has pursued the distribution of the abdominal vessels further than his predecessors, and has found an anastomosis previously unrecognised. He has discovered that there is a much greater amount of communication between the different branches of the abdominal aorta than is commonly supposed; "that not only is it possible to inject the arteries of the abdominal wall from those of the viscera; but that, to some extent, the blood-vessels of one viscus may be injected from those of another; and this not through the main trunk from which they both proceed, but through their mutual communications with an intermediate set of anastomosing arteries." The efficacy of local blood-letting in inflammations of the abdominal viscera is elucidated by this discovery.

When a practice is found, by a multitude of observers, to be good, our duty lies, I think, not in cavilling at the practice, because we cannot, at the moment, make out its *rationale*; but rather in endeavouring to discover its explanation, which generally is found to be a simple one. This is a notable instance; and, doubtless, there are many such on the brink of elucidation.

Dr. Pavy, of Guy's Hospital, whose physiological discoveries are well known and appreciated, has recently investigated the "immunity enjoyed by the stomach from being digested by its own secretions during life." "He found it not due to the living principle; nor to the epithelial layer, with its capacity for constant renewal; but to the influence of an alkaline circulation, neutralising the attacking acids

of the gastric juice." "This," says the reviewer, "is one more conquest from the vague domains of the 'vital principle' theory in the gradually increasing field of chemico-physical investigation." This is an example of a determination to examine a subject simply as it was—not preconceived; and this was the brilliant result.

Medicine is pursuing the even tenor of its way steadily but irresistibly. At no previous period has there been the same soberness of pretension, the same diligence of investigation, the same severity of deduction, that success in practice, as at present. Without anything strikingly new, every disease is receiving that careful study and rigid analysis which must and do make the rough places smooth, the crooked straight, and the dark light.

A disorder not yet imported into this country to any extent, demands a passing notice; as it may be the lot of some of us—we cannot tell how soon—to encounter it. I refer to the "trichinous disease." "A few months ago, there was a festive celebration at Hettstädt, a small town near the Hartz Mountains, in Germany. Upwards of one hundred persons sat down to an excellent dinner; and having enjoyed themselves *more majorem*, separated, and went to their homes. Of these 103 persons, mostly men in the prime of life, eighty-three are now in their graves; the majority of the twenty survivors linger with a fearful malady; and few only walk apparently unscathed among the living, but in hourly fear of an outbreak of the disease which has carried away such numbers of their fellow-diners." A full report of how they lived, and how they died, and what is to be done, will be found in the *BRITISH MEDICAL JOURNAL* for January 16th, 1864. Now, it must be confessed that there is something, not in a manner repulsive, but to a degree revolting, in being eaten up alive after this fashion. This and like occurrences have created quite a panic in Germany. It may be observed that, in Prussia, at the best tables, ham is handed round uncooked; and among the lower classes bacon is always eaten raw. A favourite sausage is largely consumed by all, in the same degree of non-preparation. Every pig, when killed, is subjected to a sanitary inspection by an officer, microscope in hand; and each housewife puts on her best "specs" with a similar intention. It is posted at the hotels, "No pork eaten here." An operation, not less novel, has been devised for the detection of this disease in the human subject, which is not calculated to originate agreeable considerations. An instrument like a cheese-taster is gently insinuated and deeply dipped into the calf of the leg, for the purpose of involving some of these epizootic intruders.

Public attention has lately been prominently directed to the system of unfattening. This has been done by a non-professional man. The application of one remedy or system to a number of resembling but dissimilar cases is, to the professional mind, sufficiently absurd; yet the public do not understand the difference. The discussion of the subject will do good. It will more particularly direct professional attention to the subject of obesity, while it will teach the public that the best adviser in matters medical is not even a successful upholsterer.

"A large amount," says the *Critic*, "of medical scepticism exists. This manifests itself either in the distrust of legitimate medicine and the employment of specifics, or the repudiation of medicine and the adoption of special systems. Empiricism in the one and scepticism in the other instance, both eventuate in the practical abandonment of those principles by which medicine as a science reduces its observation and teaching to practice, giving to theory an eclectic reality which, for the treatment of disease and the

purposes of life, is available as an art. Not the least of the many advantages which must result from the assembling together of members of the medical profession, is their practical refutation of such impressions, which ignorance suggests and prejudice or self-interest too frequently maintains."

From the varied ranks of the medical assembly, surgery stands out unassailed and unassailable. Conservative in principle, bold in conception, brilliant in operation, and successful in result, it silences cavil and defies reproach.

It must be conceded that, in cautiousness of proceeding, in ingenuity of appliance, and in completeness of treatment, obstetric surgery takes the foremost place.

What operation, I would ask, can surpass, in the brilliancy of its rescue from the darkness of its unaided issue, the successful removal of a large ovarian tumour?

I do not forget the wonders of the laryngoscope, of the ophthalmoscope, and the minute examination of the eye.

As examples of the conservative tendencies of surgery, may be named the proposal to tie the spermatic artery in enlargements of the testicle, and the lingual artery in cancer of the tongue.

The grandest example of the application of a principle remains to be told; viz., the obliteration of an aneurism of the abdominal aorta by compression. This was accomplished by Dr. William Murray of Newcastle.

Did I say that surgery was unassailed? There is one reservation. To thoughtful minds, it must be a source of pain and regret to observe the increasing tendency in the public to bring actions for malpraxis against medical men. No doubt such a practice was set on foot by the now all-prevailing custom of bringing actions against public companies, in cases of accident by railway, for example. This is a rule frightfully abused, and requires all the vigilance of medical men to stop rather than to encourage. With this tendency of the public to blame everybody except themselves, surgeons could scarcely hope to escape. Liverpool has earned a notoriety in this matter not to be envied, in the case of *Hodges v. the Surgeons of the Northern Hospital*. Had this action succeeded, it would have led to mischief not easily estimated.

The prominent features, then, of the practice of medicine, surgery, and obstetrics, may be noted as non-perturbative, conservative, non-meddlesome, and practical.

Extremes in all things are to be avoided. Mr. Haynes Walton probably erred in this way, when, speaking of the detection of iritis, he said: "Take the state of the sight as your test, and never think of the direction of vessels. The less you know of the appearance of diseased eyes, the more will it serve you."

Good examples of non-meddlesome practice are shown in Dr. Richardson's plan of the treatment of suspended animation. Dr. Aldis, also, observes: "In addition to the propriety of not meddling too much in cases of suspended animation, as from drowning, etc., I found that animals recovered more quickly from the poisonous effects of coal-gas, when merely exposed to the effects of fresh atmospheric air, than when any other means were used."

When it is remembered, that pathological actions are nothing more than physiological ones out of order, it would naturally seem to be the best plan to persuade, rather than attempt to force them to their normal duties. For this purpose, the gentlest means, the smallest doses, that will effect our object, are undoubtedly the best.

We must forget, also, some long cherished notions ;

for example, we must try to persuade ourselves that mercury has no action on the liver, etc.

Much might be said about the analysis of medicines, and whether the separation of the so-called active principles helps the prescriber or not. Take podophyllin. "In the powder now in extensive use under the name of podophyllin, there are several cognate resins, the difference between which is clearly marked by their being soluble in different menstrua. It is the group in combination that is valuable as a remedy, not the resin which predominates in quantity."

This principle is beautifully illustrated by the aniline and toluidine in the magenta dyes; also by the striking experiment of Bernard with amygdaline and emulsine. Aloes is another example.

Do medicines only hasten, and retard or modify, physiological actions? How otherwise are to be explained the transient effects of mercury, opium, etc., in kidney-disease? Is narcotism anything more than suspended oxidation?

In a paper on the Synthesis of Organic Compounds, Professor Wanklyn has ventured to declare: "Hereafter, perhaps, medicines as much more potent than quinine as quinine is than the extracts of the commonest herb that grows wild, may be the produce of our laboratories."

Dr. R. D. Thomson has clearly established the analogy between milk and flour.

This part of an address might not be considered complete without one word being said about the new *Pharmacopœia*. Is it good, or bad? Is it useful? Or is "a recognised *Pharmacopœia* but the instrument of disciplined empiricism, which prescribes remedies in ignorance of their *modus operandi*?" My verdict is, that, for an essay, it is good. "It is full of errors," say a hundred voices. What book of such a character is not? "It must be amended," say they. That is the usual course of proceeding. The fact is, the natural irritability of the profession had become so aggravated by delay, and so turgid by accumulation, that it relieved itself by a torrent of hard words and morbid criticism when informed that the book issued was only a *Pharmacopœia*. Expectation was raised too high, and the disappointment was deenominated by comments which gave "neither lustre nor illustration to the subject". "The compilers could not agree," the objectors persist. Who expected them to agree? If any error were committed by the Council, it was a psychological one. The members of Committee, in three different capitals, were placed in a similar position to Sydney Smith's two viragos in confronting garret windows. He said, "They never could agree, because they argued from opposite premises." In vindication of their disagreement, it may be asked, In what matter do men agree? It is marvellous how few men are found to accord in opinion on the most ordinary topics. I have been much struck with this fact during the last few months, in the discussion of some non-medical affairs.

The Medical Council, as a body, appears to have laboured under a similar infirmity. I observed with much regret, in their votes, the numbers stand thus: "For, 11; against, 6; declined to vote, 5." Now this should not be. If a man is elected a member of Council, he is bound to express his opinion, and to vote, if called on. "In this matter, he is responsible for what he does, and what he allows to be done. His support of a wrong cause, or his silence while it is advanced, attaches to him something of moral guilt." By some such spoliation, the Council were led to arrive at a conclusion in which nothing was concluded.

It must always be borne in mind, that the medical method of thought differs from that of most other



people. From necessity, the medical man is obliged to take a circumspcctive survey, and, by a method of exclusion, rapidly, silently, and after a while intuitively, arrive at a conclusion. Of course, from imperfect or partial comprehension, the inference may be spoiled, and the conclusion erroneous. He is apt to apply this habit of thought to things in general, and is consequently often found to be petulant with others, who consider it needful to go over a good deal of audible rigmarole before they come to a decision. Again, some people's ideas are so big that they can only see one side of them. The remembrance of these inevitable differences counsels us charity, and the broadest liberality and regard for the opinions of others. He does best who endeavours to see, as far as possible, both sides; to consider both; to act on both. One qualifies the other, like faith the fruit of love, opposed, but not opposing.

I cannot follow the Council through the long but able discussion on medical education. This is the less necessary, as they came to no agreement on the subject. One thing was clearly admitted by all: that the medical student had too much lecturing; "that the system of teaching medicine was too much professorial, and too little tutorial." While the medical student has from fourteen to twenty-one lectures a week, the Oxford man has only twelve, and these easier, and yet thought to be too many.

It must have been gratifying to the thoughtful portion of the medical community, to see that the Archbishop of York, a few weeks ago, distributed the prizes at St. Mary's Hospital, London, and, himself a distinguished teacher, give the ripe results of his experience in the management of another class of students, with different though not dissimilar aims, and both with aspirations equally elevating and elevated. Humanity is interested that the two professions, necessarily coming into frequent contact, should not only be joined, but cemented, and should mutually agree and cooperate in their several and sacred duties.

The British Medical Association, as far as I know, has been unusually quiet during the past year. There have been no internal convulsions that I have felt; no external thunderings that I have heard. I do not find fault with this state of repose. That nothing has happened during the past year is no reason why nothing should occur during the next; why an occasion should not arise demanding the utmost exertions of the Association to help or to crush, to defend or to defeat. It is very easy to find fault with the Association for doing nothing; but it is not so easy—as was lately said in another place—to suggest a different or a better course.

Under the protecting influence of our new Secretary, we may confidently hope that, financially, the Association will come out strong and unembarrassed.

In the lack of graver duties, I may be pardoned for suggesting that the Branches, as well as individual members of the Association, might engage themselves usefully and actively in hygienic measures. There is range enough; and, of course, proceedings would be modified by the requirements of the neighbourhood. It is freely admitted that preventive medicine is medicine in its highest degree of development. The profession had better initiate advances, rather than ingloriously follow, in matters pertaining to their office. For example, houses of reception for zymotic diseases should be established in every town. Asylums for the lower middle classes are grievously needed. Baths, gymnasia, and elevating amusements should be instituted; and exercises for ladies invented and encouraged.

Our JOURNAL might be made the medium of com-

munication and discussion on these and kindred topics. Under its present able editorship, a mass of information might soon be collected, digested, and utilised, which would redound to the credit of the profession, and minister to the general weal.

## Reviews and Notices.

THE ESSENTIALS OF MATERIA MEDICA AND THERAPEUTICS. By ALFRED BARING GARROD, M.D., F.R.S., Professor of Materia Medica in King's College, and Physician to King's College Hospital. Second Edition. Pp. 391. London: 1864.

THE appearance of this edition seems to have been hastened by the publication of the *British Pharmacopœia*, as the author contemplated a fuller exposition of therapeutics, which he now intends to bring out as a separate volume a few months hence. This volume is, therefore, to be viewed as a handbook of materia medica illustrative of the *British Pharmacopœia*.

It begins with an useful table, showing the more important differences of nomenclature between the *London Pharmacopœia* of 1851 and the *British Pharmacopœia* of 1864. A second table shows the alterations in strength.

An introductory chapter describes the weights and measures, and the various groups of pharmacœutic preparations.

The materia medica follows, and is divided into—1. Inorganic substances; 2. The vegetable kingdom, following the natural orders; 3. The animal kingdom, arranged according to classes and orders.

Reference to any substance is facilitated by a good table of contents in front, and an index at the end. A good posological table, and another showing the proportions in which the more important drugs are contained in the official preparations, conclude the work.

The book contains a well-condensed compendium of materia medica. The descriptions are short, but clear. The chemical processes are so described as to show the *rationale* of the separate steps. The properties and composition are then given; after which follow the therapeutics, dose, and adulterations, the chemical tests for which are given, with full information as to the substances to be detected by them.

An occasional error may be detected, from the author following too implicitly the directions and formulæ of the first edition of the *Pharmacopœia*. As one of its authors, he may have felt a delicacy in correcting these. In describing the formation of hydrochloric acid, he omits to state that heat is essential to the success of the process. He accepts without criticism the *Pharmacopœia* formula for nitrite of soda ( $\text{Na O, NO}^2$ ), as if it were a pure homogeneous chemical, though it is known to be a mixture of nitrate and carbonate, with about one-fourth only of nitrite (Squire-Redwood).

In the sealed preparations of iron, he has followed the large edition, and ordered the preparation to be evaporated in this liquid state on porcelain or glass plates, which leads to failure, instead of directing them first to be evaporated to the consistence of syrup, as is done in the small edition.

For colloid, he gives the formula of the *Pharma-*

*copœia*, which directs equal parts of sulphuric and nitric acid; this gives an insoluble pyroxylin. He adds, in a bracket, "A weaker acid is required for making a soluble pyroxylin." He thus practically leaves the reader without exact information as to which acid should be weaker, and how much. The error has been elsewhere explained to depend on the strength of nitric acid having been changed from specific gravity 1.420, as first intended, to 1.500.

These errors do not greatly detract from the merits of a work, which, as a whole, seems to deserve confidence for its accuracy.

The therapeutic part is practical, giving briefly the main effects of medicines; though, in the brief compass of his work, these are by no means exhausted. We trust that, in his forthcoming work on therapeutics, he will attempt to generalise, as far as present knowledge will permit, some practical therapeutic theories, so that the profession may see the barrenness of the land in this direction. At present, the great majority of us prescribe without any deeper view than a knowledge of certain sensible effects, and a traditional faith in certain occult influences for which we can give no reason. A probable *modus operandi* for every medicine administered ought to be part of any work on therapeutics. At present, it is little alluded to, except in chemical medicines.

We subjoin a few therapeutic notes on a class of medicines to which Dr. GARROD has given special attention.

*Carbonate of Lithia* is valuable in keeping uric acid in solution during its transit through the urinary organs, and in preventing its deposition in the structure of the body. It acts as a diuretic; and, in the same dose, renders the urine more alkaline than the corresponding salt of soda or potash.

*Bicarbonate of Potash* acts as a direct antacid, but does not produce the sedative effect of liquor potassæ. It renders the blood and urine, and probably many other secretions, powerfully alkaline; hence it is a powerful alterative.

*Bicarbonate of Soda* is very similar to the above, except that urate of soda is very much less soluble than the potash salt; and hence the bicarbonate of soda is less adapted for the treatment of the uric acid diathesis.

*Lime Water* is an antacid, both in the intestinal canal and after absorption into the blood and secretion. It differs from soda and potash in being astringent and desiccative, diminishing secretion; and is hence very useful in diarrhoea connected with acidity.

*Colchicum* increases the flow of bile. The fæces are more coloured, and give evidence of containing the organic portion of that fluid, as well as the colouring matter. The urine is sometimes increased in quantity; and it is generally asserted that the urea and uric acid are also augmented, but this he doubts. The heart's action is diminished; and to this Dr. Garrod thinks that its controlling action in acute rheumatism and other inflammatory affections is due.

*Phosphate of Ammonia* in solution can dissolve a considerable amount of urate of soda. Clinical experience has shown that it is of great value when a tendency to uric acid calculi exists; also in certain conditions of the gouty habit.

Dr. Garrod expresses frequent doubts as to the re-

puted efficacy of medicines which have still a reputation, such as *arnica* and *taraxacum*.

Of *Ammonia*, he says its action differs much from that of alcohol, probably influencing the ganglionic and spinal systems rather than the brain proper, and increasing the functions of the secreting and excreting organs.

*Caffeine* or *Theine* possesses the power of checking the changes or metamorphoses of the body, as shown by the diminished formation of urea.

*Ferrum Reductum* is useful when we want the blood-restoring properties of the metal without any astringent action.

*Tincture of Perchloride of Iron* is a most powerful astringent, useful in passive hæmorrhages and other discharges.

These give an insight into Dr. Garrod's sketches of therapeutics. We shall be glad to receive from his hands a complete work on the subject.

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A SHORT DESCRIPTION OF THE THERMÆ ROMANO-BRITANNICÆ, or the Roman Baths found in Italy, Britain, France, etc. By R. WOLLASTON, M.D. Pp. 68. London: 1861.

In this elegant volume, Dr. WOLLASTON proposes to show the identity of structure of the Roman Bath, as found in Britain, Italy, and other countries of the continent; and also "to exhibit the archaeological and decorative features of the baths, rather than to elucidate their medical properties." The volume will be found to contain an interesting description of the Roman Bath in general, and of many of the baths found in different localities; and doubtless fully proves the proposition of its author.

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RIOT AT TUNBRIDGE WELLS. At the last Maidstone Assizes, several persons, living at Tunbridge Wells, were charged with riotous proceedings in that town. It appeared that a medical gentleman named Webber, residing at Tunbridge Wells, had rendered himself obnoxious to the inhabitants in consequence of his having written a letter to the Secretary of State reflecting upon the sanitary state of the town. An inquiry had been instituted, and a government inspector reported favourably upon the drainage and sanitary condition. Mr. Webber's opinions, however, remained unaltered, and he became subject to great unpopularity because he was known to entertain, and was believed to express opinions injurious to the town as a place of fashionable resort. Meetings were got together, and a determination announced to drive him out of the place. On Saturday, July 2nd, a number of people collected on the common and proceeded with a figure stuffed in the form of a pig to Mr. Webber's house, before which they assembled, and with shouts, cat-calls, and discordant cries they proceeded to set fire to the effigy, having first fastened it to the iron railings in front of the area. Some of the burning material fell into the area, fireworks were thrown into the verandah, and the plate-glass windows were smashed with stones. At this time there were several ladies in the house, including Mrs. Webber and her daughters. Some of them were struck with the broken glass, and all were much alarmed and terrified. The disturbance went on for nearly two hours, and at one time nearly two thousand people were collected together. Baron Martin suggested that it was a case for arrangement, and in the end the prisoners were dismissed on their own recognisances, and an engagement to pay £20 for the damage done.



# British Medical Journal.

SATURDAY, AUGUST 20TH, 1864.

## ARMY MEDICAL SERVICE.

PROFESSOR DOUGLAS MACLAGAN, in his address to the graduates of Edinburgh on August 1st—the capping day—remarked as follows on the Army Medical Service.

“Rank in the army is the index of the estimation in which a man is held. Uniform is the sign of rank; and army medical officers would be quite right in insisting upon a proper uniform so long as they wear one, with all the rights and honours to which the rank indicated by that uniform entitles them. It is also said to be a wild ambition on the part of the doctors for military authority and command. These writers see, or pretend to see, in army surgeons only what Jonathan Oldbuck saw in his vision when, in the height of the old volunteering fever, he went to consult his surgeon.

“He came, but valour had so fired his eye,  
And such a faulchion glittered on his thigh,  
That, by the gods, with all that load of steel,  
I thought he came to murder—not to heal.”

(*Laughter.*) A complete delusion. Medical men as a class have, I hope, a better idea of the value of their own professional functions than to think that they gain status by exchanging them for military work. His Royal Highness the Commander-in-Chief tells a deputation of medical men, who wait upon him on behalf of their brethren in the army, that it is all for discipline. Perfectly right. Common sense asks, what has a doctor, who has had no military education, to do with commanding men in action, so long as the youngest ensign is alive to give an order? But how, if this refer, not to commanding men in action, but to boards of inquiry as to the healthiness of barracks, hospitals, and other sanitary questions? Here common sense would say that, as these are things specially belonging to the doctor, he is the proper person to preside over such boards. But, no; upon this principle of discipline, we are told, he is to give place to the combatant officer. Is no one to be under discipline but the doctor? If it be wholesome discipline for him to yield to the combatant, though junior to him in rank, as regards matters purely military, would it not be an equally wholesome discipline for the combatant to yield to the doctor in matters purely medical? Is the medical officer to be held as possessing less of that devoted courage which has always so nobly characterised British officers? My answer is, that the man who can coolly take up an artery under fire, requires at least as much courage as he who, with the excitement of battle, leads his battalion or his company. (*Applause.*) Do medical officers not display this quality in actual warfare? My answer is, that in proportion to their numbers, more medical than combatant officers have earned for themselves the Victoria Cross. Upon what principle, then, is the medical officer to be placed on a lower platform than the combatant of equivalent rank? So long as he does his own duties properly, and sticks to them, I maintain that the medical officer has a full title to every advantage, every honour, every mark of public consideration that belongs to his rank, whatever that may be; and it is the refusal to carry out fairly the Warrant of 1858, which pro-

mised these, that constitutes the real grievance of the army medical department.”

Dr. MacLagan then gives this advice to the ninety-three gentlemen who had just been capped, and were entering upon the business of life. We hope that the Horse Guards will note the fact; and reflect upon the necessary consequence of such advice as this from the Edinburgh University.

“It is a significant fact, that there are in her Majesty’s British and Indian forces about two hundred assistant-surgeons vacant, and not a fourth part of that number of candidates for them. It has, within a short time, been asserted that there is a host of young men from Dublin and Edinburgh ready to apply for them. Let Dublin answer for itself; but speak you for Edinburgh. The Horse Guards have a traditional policy of yielding nothing to the doctors except from necessity. Tell them that you decline to join the army while things remain as they are. Tell them that you decline to enter a service the head of which tells us, apparently with perfect satisfaction to himself, that the men at present joining the department are good third class men. (*Laughter.*) Tell them that you decline to place yourselves in that category. (*Applause.*) Let us, as a profession, firmly but temperately tell the authorities what is the mind of the profession on this subject; and let them candidly and dispassionately weigh what we say to them. If we speak out unitedly, firmly but calmly, we shall be heard. What happened last Tuesday, when the House of Commons threw out a bill which would have had the effect of lowering the character of the Indian medical service, gives me the assurance that our voice will find in Parliament an echo which will reach the deafest ear of the War Office and Horse Guards. Let them provide more adequate pay for those who enter, and more adequate retiring allowances for those who spend their best years in their service. Above all, let them abjure all puny faith; and give security that they will carry out warrants in an honest and faithful spirit; and then no one will be more ready than I to encourage young men to join a service to which any of you might be proud to belong.”

## RESPONSIBILITY ATTACHING TO CHLOROFORM ADMINISTRATION.

A CASE of death from chloroform, which lately occurred at St. Mary’s Hospital, and which has been the subject of a coroner’s inquiry, raises a question of much importance: On whom should rest the responsibility of the administration of the chloroform? It would seem that, at the present moment, the answer to this question is not satisfactorily given. The surgeons in most hospitals, we believe, have little or nothing whatever to do with the responsibility of the administration. The surgeon decides to operate; and the patient is then handed over to the chloroformist of the hospital, who is, it would appear, the only person responsible in the matter. Now, we venture to think that this should not be so. The decision as to the administration of the chloroform should, in all cases, rest upon a surgeon or physician of the hospital. If the surgeon have any hesitation in ordering the administration of the chloroform,

then he should call in the advice of one of the physicians of the hospital: and so arrive at a conclusion. Certainly, in our opinion, the decision as to the giving of the chloroform should not rest with the chloroformist. The chloroformist should receive his directions, as to the administration, from the surgeon or the physician; and then, of course, proceed duly to exercise his skill in giving the chloroform. We think this position of the matter is so clear, that we hope it will be generally adopted in our hospitals. When precaution of this kind is taken, if any unfortunate results ensue, there is always a responsible person on whom at once falls the burthen of the event. If the surgeon, or the physician at the request of the surgeon, consent to the giving of the chloroform, then, of course (due care having been exercised in coming to the conclusion), the public will be satisfied that all human precaution was taken, and that no one is responsible for the fatal occurrence. Chloroform never should be administered except under the direct authority of either the surgeon or the physician.

A CORRESPONDENT from Calcutta gives us the following account of the reception of the new Medical Warrant for the Indian Service in India.

"The long expected Warrant for the Medical Service in India has at length arrived. The financial part of the scheme is now settled for the military medical officers; and no doubt, in the opinion of the authorities, the long vexed question has received a satisfactory solution. There need be no more grumbling. The medical service is well paid, and nothing is left for complaint.

"To an ordinary observer it may appear so; but, when tested by the application of the principle which governs the remuneration of all government appointments in India, the reality will become apparent. The medical officers have received the pay of their rank (to which they were entitled five years ago); but they have had all head money and staff allowances discontinued. They are, in fact, worse off than they have ever been, and all incitement to work and distinguish themselves taken away; for, under the new scheme, a medical officer will receive as much pay when on leave in the cool breezes of Simla, as on duty with his regiment in the arid plains of the North West or the swamps of Bengal.

"The scheme must prove a failure; and it is impossible that men will be found to enter a service where they are paid less after twenty years than the uncovenanted clerks of the Government offices, or the civilian of one-third of their service and half their age. If the medical service is ever to be restored to its original integrity, to say nothing of its being raised to its proper standard, such measures as the one now before us must be entirely superseded. The medical officers seek only their just dues—the pay of their rank, staff allowances like their military brethren for charges or staff appointments, and the consideration that is accorded to all other officers of their rank and standing. Until this be done, the service will never thrive. It needs but a few concessions—most reasonable, and clearly their just right—to make the medical officer of the Indian and the British service as contented as they have generally proved

themselves to be efficient. There is no want of loyalty or desire to do their duty; but there is intense and universal despondency and despair as to their present position and their hopes of improvement. Let any one study the old and new Warrants, and he will be convinced that this new Warrant, instead of being an improvement, is but another disappointment—another push towards the bottom of the ladder it has so rapidly been descending."

We are certainly what the Yankces call "progressing" in the matter of advertising ourselves to the public. We had thought that, one way or another, the thing had been already pretty well worked; but ingenuity or self-interest has discovered another way of how to do it. A plan, which seems to be developing into a system, has lately sprung up, of discussing and treating learnedly points in medical and surgical practice in the *Times* and other daily journals; so that, in truth, members of our profession, who are continually, and with very great justice, accusing the public—even the educated public—of the grossest ignorance on medicine and surgery, are now actually appealing to the same public to decide moot questions of practice! The truth is, we need hardly say, that at the bottom of all this letter-writing to the daily journals lie presumption, vanity, and the advertising vein. A death from chloroform occurs in one of our hospitals, and up starts a doctor to tell the public that no one knows how to administer the anæsthetic but himself. A man is shot through the chest, and forthwith, in the public papers, comes out a discussion touching the extraction of bullets. All this shows very ill for our profession. Those who write such letters must know as well as we do that those to whom they address their remarks are utterly incapable of giving an opinion on the matter. As a proof of the fruits of this most unprofessional proceeding, we give an extract from a daily paper, not very flattering to our profession, but certainly not an unfair commentary on the part of the ignorant public who have been appealed to by these paper letter-writers of the profession. Gentlemen may gratify their own conceit by the proceeding; but we will tell them that they add nothing either to the credit or the knowledge of their profession by evoking comments of the following character. The *Lancet*, moreover, does its best, apparently, to encourage the unprofessional proceeding. Again and again have we noticed that these anonymous and addressed-to-the-public effusions are seized upon by the *Lancet*, and solemnly criticised by that journal, instead of being treated as they ought to be, with silence and contempt.

"A very serious question arises among the 'medicos', and one which only shows that even in surgery, by far the strongest point of modern therapeutics, we are in a very poor way indeed. Sensible people have for many years abandoned the superstition that medicine, as practised among us, is anything but an imperfect and empirical set of experiments. The



best men are those who meddle least with Nature. There are specialists, there are lady-doctors, there are speculum-men, and the rest of them; but Heaven only knows the statistics of the victims who 'die of the doctor'. But in surgery, which is mechanical, and which has also been growing conservative instead of 'slashing', the public had confidence; yet what does it see? It sees a famous professor groping in the wound of Garibaldi, and finding no bullet; while a little grey Frenchman pokes a bit of rough china pencil into the hole, and finds it marked with lead; extracts the token of Italy's gratitude, and saves a hero. It sees now a tremendous discussion arising as to whether the bullet, which could be plainly felt under the skin of the poor guardsman, ought or ought not to have been extracted. The ball, after lodging invitingly for a time within reach, slipped back into the cavity of the chest. Congestion of the uninjured lung set in. The man sank fast, and died at the end of all the hope and all the discussion, certainly partly—perhaps wholly—through the fact that the bullet was not extracted. We publish a letter from an experienced surgeon, which takes a view decidedly at variance with that of the gentleman who conducted Cooper's sad case. The ponderous professional influence of the *Lancet* goes the other way; but then the namesake of the little weapon that stabbed Cavour, and slew its thousands fifty years ago, is rather of the opinion of Molière's doctor—namely, that a patient had better die *secundum artem* than live by heterodox means. All we say is that, were we markers at Wimbledon, we should like to be sure that the profession had made up its mind whether to leave an ounce of lead in a man's body, when it can be got at without probing, is the kind of allopathic dose to ensure his recovery."

THE second number of the *Ophthalmic Review* has appeared. Its contents indicate, as did those of No. 1, that Germany is still more active than England, America, and Australia in the cultivation of matters ophthalmological. In this number, Dr. Rosebrugh of Toronto gives a paper "On a New Ophthalmoscope for Photographing the Fundus Oculi". Mr. J. Z. Laurence tells "Of some Ophthalmic Instruments". A Clinical Lecture by A. von Grafe, on Exophthalmos, is translated. Mr. Thomas Windsor gives a "Note on the Tenuis Sclera and Sclerotics; and a Retrospect of British and Foreign Medical Journals", in which England cuts a very meagre figure. Our own JOURNAL is mentioned in flattering terms, as "having done good service". We quote the passage, as a specimen of the style of the journal

"Our erudite contemporary, the BRITISH MEDICAL JOURNAL, has indirectly, and surely undesignedly, done good service to the cause of scientific progress. Deeply impressed with the pestilent character of all knowledge, and groaning under the conviction that the members of the medical profession are too learned and not sufficiently venal, the journal in question has lent its columns to an endeavour to crush what is, perhaps, the greatest of the many modern triumphs of surgery. It has sown dragon's teeth, and they have sprung up armed men. The careful and complete lectures of Mr. Wells are only a single evidence that the members of the medical profession recognise it as their first duty and their truest interest to seek to heal the sick by every means that

industry and science can command. Such a conviction is irreconcilable with that worship of the 'almighty dollar' which it is the chief function of the 'organ of the Association' to advocate. The same man cannot pursue truth, and be over-greedy after gain. Our contemporary will do well to profit by a controversy which teaches that medical practitioners will not accept an American view of their moral and social obligations."

As some doubts seem to have been entertained with regard to the correctness of a statement lately made by us, we beg again distinctly to repeat, that we have heard from the most unexceptionable authority that the late Mr. Green most earnestly endeavoured to persuade the College of Surgeons to introduce into their last Charter a clause enabling country Fellows to vote by proxy at the election of Councillors. He was very greatly chagrined and disappointed that his efforts to effect this act of liberality on the part of the College were unsuccessful.

M. DIDAY complains that medical literary criticism is almost dead in France. The cause of this he attributes to the advertising system, which is becoming so general in medical journals.

"It is a common failing, one of the minor sins of every operator," says M. Diday, "to try and make out that none of his patients die from the effects of his operations."

Our readers have already been told of the strange disease, the demonopathico-hysterical epidemic at Morzine, in Savoy. Dr. Kuhn, physician to the Insane Asylum at Pau, and who has been sent on a mission to Morzine, repudiates the interpretation given of the nature and cause of this affection by Dr. Munaret. He says, in writing to the *Gazette de Lyon*: "I have been two months at Morzine; I have seen all the patients, and all the people. Your correspondent attributes the disorder to a protestant propagandism. This is the first time I have met with such an explanation, which exists in reality only in the mind of its inventor. The present epidemic has been produced as follows. During the whole of January, a mission has been preaching at Morzine; a dozen priests were engaged in the business; and the inhabitants passed eight or ten hours a day in church. This mission laid the train, and Monseigneur the Archbishop exploded it. These inopportune ceremonies could but have one result, in causing a renewal of the epidemic, as every person engaged in the cure of nervous diseases must be well aware."

Experiments made by M. Verhegen at Brussels prove (so we read) that the quantity and the richness of the milk are increased by removing the horns of the cow. The operation must be performed at an early age.

M. Flourens has presented to the Academy a book written by himself, entitled *Comparative Psychology*.

In a late discussion at Lyons on resection of the knee, the following remarks were made. M. Garget said that, from what he could understand, some surgeons, like Mr. Fergusson, were over-fond of resections; whilst others, like Mr. Prescott Hewett, were declared enemies of the operation. In the wards of the latter gentleman he had seen a patient who had been operated upon by Mr. Fergusson, and set down as a cure. M. Ollier remarked, that such facts were, no doubt, often to be noted in English statistics. The journals employ persons to take notes of interesting cases in hospitals; and, if the patients operated upon live only a week, they are set down on the list of cured. There are in London surgeons like Mr. Paget, who are, as a rule, wholly opposed to resection of the knee—an operation which has been so much abused of late years. We are even told of a patient who went on foot to Mr. Fergusson to be operated upon. M. Delore believed that the operation was very seldom needed. In a vast number of cases, all that is required are general curative agencies and the expectant method. M. Ollier objected to the operation, as a rule, in children; because in them the diseased articulations may be cured without operation, and because of the great shortening of the limb which is produced in these cases. In England, its employment in children is much too frequent.

#### ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the Committee, appointed at the Freemasons' Tavern on July 7th, favourable to an alteration of the existing laws by which the election of members of the Council is at present conducted, was held in the Arts School, Cambridge, on Thursday, August 4th; George Southam, Esq., of Manchester, in the chair.

At this meeting the Fellows of the college were invited to attend, and the chairman requested that any gentleman present desirous of doing so, would express his opinions upon the subject.

The Secretary read a letter from the Assistant-Secretary of the college, stating that he had received the resolution passed at the previous meeting, and had laid the same before the Council.

An animated discussion then followed upon the objects of the meeting, in which several Fellows took part; when it was finally and unanimously resolved, on the motion of Mr. Martin of Hammersmith, seconded by Mr. Bottomley of Croydon—

“That this meeting request that the Committee appointed by the preliminary meeting at the Freemasons' Tavern, be requested to continue their efforts to procure the necessary alterations as to the mode of voting, so that proxies may be introduced.”

JOHN HATTON, M.D., F.R.C.S., *Hon. Sec.*

N.B. Any Fellow of the college wishing to express his opinion upon the subject, is requested to forward his communication to the Honorary Secretary, Graythwaite Lodge, Belvedere, North Kent, S.E., in order that the same may be laid before the next meeting of the Committee.

#### THE ARMY MEDICAL SERVICE.

THE following memorial has been presented to Lord Palmerston by the Royal College of Surgeons of Edinburgh:—

“That the Royal College of Surgeons of Edinburgh have long been charged with the duty of licensing surgical practitioners, and have always endeavoured, to the utmost of their power, to promote the welfare of the medical profession for the public good. That the attention of the College has been called to the present state of the army medical department. That it is obvious that that department is not in a satisfactory condition, there being, as the College have reason to believe, wide-spread discontent among the army medical officers,—the medical service of the army having become so unpopular that medical men are repelled from it instead of being attracted to it,—and that there is found to be great difficulty in filling up vacancies as they occur, and that to an extent which seriously mars the efficiency of the service, and imperils the health of the army. That, under present regulations, the service does not hold out inducements sufficient to secure a supply of competent medical men; and that much fewer high class medical men than might be expected, under different arrangements, offer themselves at the competitive examinations. That, in consequence of this lack of candidates, the army authorities have been obliged to resort to the very extraordinary expedient of advertising for civilians to act as assistant-surgeons, to whom appointments for home service are offered without examination. That further, for the same reason, it has been proposed by the Secretary of State for India to abandon competitive examination in the case of army medical officers for the Indian service, and to return to what would be equivalent to the old system of patronage. That a due regard to the health of our brave soldiers demands that they should be protected from incompetent medical attendants, and that in that important view a state of matters so unsatisfactory should be put an end to. That various reasons have been stated why the service should be at the present time so unpopular; such for example as that the excellent warrant of 1858, which gave so much satisfaction when it was originally issued, has not been carried out as it ought to have been; that its operation has not been extended to India, as was due to Indian medical officers; that medical officers, in consequence of the deficiency in their numbers, have a difficulty in getting leave of absence, have an undue share of foreign service, and are very slowly promoted. That, moreover, they are slighted as regards rank, have degrading duties unnecessarily imposed upon them, and, as regards pay and arrangements as to retiring pension, are not remunerated as is due to men belonging to a liberal and scientific profession—qualifications in which can be attained only after long years of study, and at great cost. That the College refrain from giving an opinion as to the relevancy of these alleged causes, believing, as they do, that the only satisfactory means of ascertaining the real causes and amount of the evil, and of applying the proper remedies, is the appointment of a Royal Commission to inquire into and report regarding the whole matter. That this College would therefore respectfully, but earnestly, petition your Lordship to advise Her Majesty to issue a commission, constituted of men of weight and impartiality, in whose judgment confidence may be reposed by all concerned, and especially by the public, who are so deeply interested in the issue. In name and by authority of the Royal College of Surgeons, BENJAMIN BELL, *President*.”



## Special Correspondence.

### EDINBURGH.

[FROM OUR OWN CORRESPONDENCE.]

THE 1st of August is always an important day in the University of Edinburgh; for on that day the ceremony of *capping* the successful candidates for the degree of Doctor of Medicine takes place. The crowded assemblage of ladies who always throng to that ceremony shows how much interest these proceedings awaken—an interest which has a double origin, in the nature of the ceremony itself, and in the fact that in not a few cases the beholders stand in the relation of mother or sisters to the newly-fledged young doctors.

The custom of capping is one of great antiquity in our Scotch Universities, and consists in the successful candidates for degrees being presented to the Chancellor or Vice-Chancellor (formerly to the Principal or Regent), who, placing a cap upon the head of each, admits him to the degree. Although the ceremony may be of much greater antiquity, it is certain that in the seventeenth century the custom of “capping” graduates prevailed. In the appendix to Spottiswoode’s *History of the Church of Scotland*, published in 1677, the ceremony of *laureation* in King’s College, Aberdeen, is described. From the words pronounced by the Regent, it is evident that the cap was at that time placed upon the candidate’s head, as an essential part of the ceremony. “Et in signum manumissionis tuæ, caput tuum hoc pileo adorno; quod ut tibi felix faustumque sit, Deum optimum maximum precor.” Formerly the capping used to take place within the walls of the University. Of late years, however, the Assembly Hall of the Church of Scotland has been preferred, as it affords more ample accommodation than our University buildings. It is, I may remark, to be deplored, that we have no room in that building which, from its size, can be considered well adapted for holding large University meetings; hence our graduations and the meeting of the General Council of the University necessarily take place outside its walls.

The graduation on Monday was not certainly behind those which have preceded it, either in the number of successful candidates, or in the *éclat* and success which attended their legal admission into the corporate body. Ninety-three candidates were on that occasion presented to Sir David Brewster, who unites in his person the two offices of Vice-Chancellor and Principal. Of these gentlemen, four received gold medals for their theses. It may not be known to all of your readers, that in Edinburgh the old custom of requiring every candidate for the degree of Doctor of Medicine to defend a thesis before the University is still kept up. The majority of candidates content themselves with the presentation of mere compiled essays. A few of the more ambitious, however, aim higher; and every year a certain number of the essays attain a high degree of excellence, being

founded on the original investigations of their authors. To the best of these theses the Medical Faculty awards gold medals; the *sine quâ non* to a thesis being admitted to competition consisting in the fact of its being the result of original investigation, and of its containing some contribution to medicine or the allied sciences, which, if published, will reflect credit on the University. It is, I presume, merely for the purpose of keeping up the *original* essays, that the old custom of requiring theses is continued.

This year, eleven theses (an unusually large number) were deemed worthy of competing for the medals; and of these, four were successful. The medalists were: Dr. William Mitchell Banks, for a thesis “On the Wolfian Bodies of the Fœtus, and their Remains in the Adult;” Dr. Charles Parsons, who wrote “On a Form of Bronchitis (simulating Phthisis) which is peculiar to certain Branches of the Pottery Trade;” Dr. Robert Bremner Thomson, who presented “Contributions to Vegetable Physiology;” and Dr. Alfred Marchmont Watson, whose thesis consisted of “Observations on the Contractions of the Uterus after Labour, and on the Alteration in Form and Bulk which it undergoes during the Lying-in Period.”

After the capping and the presentation of the medals, an address was delivered to the graduates by the “promoter” for the present year, Professor MacLagan. As your readers have already had an opportunity of perusing that address, I shall confine myself to saying that the appropriate nature of the sentiments therein expressed was fully equalled by the manner in which Dr. MacLagan delivered his admirable address. The severe tone in which he alluded to the medical services of the army and navy, and especially to the former, has given the greatest satisfaction to the general body of students and medical practitioners in Edinburgh.

Professor Laycock drew his summer course of lectures on Medical Psychology to a close a few days since, and chose as the topic of his last address the *legal responsibility of the insane*, with special reference to the case of a man (Bryce) who was recently tried before the High Court of Justiciary in Edinburgh for the murder of a girl, and who was found guilty and executed. On the occasion of the trial, Dr. Laycock was called as a witness for the defence; and gave evidence to the effect that the murderer was, in his opinion, a man of unsound mind; and that he had committed the murder under the influence of an attack of maniacal excitement.

Without attempting to give any of the details of this case, I may in a few sentences state the chief facts, so as to show how differently the case has been judged by the public and the general body of the profession here, and by Dr. Laycock.

Bryce, the murderer, is proved to have been a man of low mental capacity, which he had probably lowered by the abuse of intoxicating liquids. Of a naturally jealous and passionate disposition, education had done nothing for this man; for, as he grew

older, his passions became more and more uncontrollable. Having suspected that a poor girl (Jane Seaton) had attempted to thwart his designs by speaking unfavourably concerning him to a sweetheart of his, he persistently threatened for some months to do her some harm. At length, arming himself with a razor, he proceeded one morning to the house where his victim lived as a servant, and there perpetrated the crime. Shortly before committing the murder, the prisoner was seen by a blacksmith's apprentice, who described him as having a very peculiar expression of countenance. After committing it, he quietly walked away across some fields; and it was only after being informed that he was being pursued, that he made any attempt to escape. When captured and brought before the sheriff for examination, he made a declaration to the effect that he recollected nothing from the time when he first entered the room where he first attacked his victim until he was found lying in a field at a considerable distance from the scene of the murder. The facts of the case are now not complete, unless we add that, after being sentenced to death, the convict Bryce admitted the justice of the sentence, and confessed that the statements which he had made as to not recollecting the crime were made with the purpose of misleading.

The public saw in the case of Bryce the ordinary chain of circumstances revealed in trials for murder. A man of degraded mind, given to vicious habits, of an uncontrollable temper, suspects, from certain circumstances, that he is the object of the ill-will of another person; and, after meditating over his crime for some time, he carries it into effect. In the "raised" look of the guilty man, the majority of people can see nothing more than they would expect; for who would expect an appearance of coolness in a man who was about to carry out a crime which he had meditated for months? A lunatic alone could, under the circumstances, have had an appearance of indifference and unconcern. In the statement made when captured, the public only saw the wilful falsehood of a guilty man trying to evade justice. On the other hand, Dr. Laycock formed the opinion that Bryce was a man originally predisposed to morbid brain-action. He appears to have formed this opinion from there being a history of hereditary insanity; from the morose and passionate character of Bryce; from the imperfect development of his skull; and from the want of symmetry between the two sides of the face. "This wasting," Dr. Laycock remarks, "corresponds to some internal brain-defect of the same kind, the nature of which a careful examination of the body after death might have revealed." At last, Dr. Laycock supposes, Bryce became the subject of well-marked insanity, of a morose, melancholic character. In an aggravated state of his malady, he committed a murderous attack upon a girl against whom he entertained insane suspicions (?), which was probably followed by a loss of memory, such as is so characteristic of the homicidal delirium of epileptics. And who can tell, argues Dr. Laycock, that Bryce was not

an epileptic? For his part, he would have had him watched, especially at night, to determine this point. From the "raised" look which Bryce wore before the murder, Dr. Laycock drew what he considered evidence of diagnostic value. "It (*i. e.*, the look) was morbid. Its true nature is known to us, who have seen it; but those who have not seen it could not conceive what it was like, nor what it meant." "The probability is that, as he had just awoke from a prolonged comatose sleep of eleven hours' duration, his brain was in a state something like that of somnambulism; and the look, which was so peculiar as to attract the notice of the blacksmith's boy, was of the kind observed in sleep-walkers." Lastly, Dr. Laycock attaches no value to the confession of the prisoner.

Although the great part of Dr. Laycock's lecture was taken up with a fuller exposition of the views which he had expressed at the trial of Bryce, he yet devoted considerable attention to questions of general interest in connexion with it. Dr. Laycock insisted on the anomalous condition of English law with regard to insanity. Our laws, he showed, do not in any way fix the responsibility of the insane. He pointed out the objectionable nature of the mode which prevails of examining medical men in our courts of law; they being obliged, by the very way in which their examination is conducted, to take a *side*—to become, as it were, partisans for the prosecution or defence. He appeared to advocate the system, could it be introduced, of submitting medical questions to medical juries. He insisted, in conclusion, that medical men should be protected in the exercise of their difficult and personally dangerous duties towards lunatics, and should be exempt from actions at law for damages.

After the conclusion of Dr. Laycock's lecture, prizes were delivered to the members of his class by Dr. Browne, one of the Commissioners of Lunacy for Scotland.

Considerable excitement prevails as to the issue of the contest between Professor Lister and Mr. Spence for the Chair of Surgery. The first meeting of the curators (in whose gift the chair is) will be held in about a fortnight's time; and it is expected that the result of their deliberations will probably be made known during the first days of September.

THE FIGHT BETWEEN THE ALABAMA AND KEARSAGE. M. Dufour, a surgeon of the Imperial navy, has published an interesting account of the wounded seamen who were brought to the naval hospital at Cherbourg after the engagement between the *Alabama* and the *Kearsage*. Of fifteen men, one is dead, two remain in a dangerous state, the others are recovering. For some days victors and vanquished lying near each other in the same room forgot the civil discord of which they were the victims. They were visited with the same solicitude and the same humanity by the officers of the ship which survived the engagement. One of the first remarks suggested by reading M. Dufour's statement is that the greater number of the wounds were caused not by cannon shot or shell, but by splinters from the ship.



## Association Intelligence.

### THE MEDICAL PROVIDENT FUND.

The Chairman has the pleasure to announce the promise of the following sums to the Guarantee Fund:—

|  | £. | s. | d. |
|--|----|----|----|
| Dr. Paget (Cambridge) .....                    | 10 | 10 | 0  |
| Dr. Symonds (Bristol) .....                    | 21 | 0  | 0  |
| Sir Charles Hastings (Worcester) .....         | 10 | 10 | 0  |
| Rev. Dr. Bell (Goole) .....                    | 10 | 10 | 0  |
| I. B. Brown, Esq. (London) .....               | 5  | 5  | 0  |
| T. Turner, Esq. (Manchester) .....             | 10 | 10 | 0  |
| Dr. Radford (Manchester) .....                 | 21 | 0  | 0  |
| Dr. Paul (Camberwell) .....                    | 5  | 5  | 0  |
| E. Daniell, Esq. (Newport Pagnell) .....       | 5  | 5  | 0  |
| E. Lund, Esq. (Manchester) .....               | 5  | 5  | 0  |
| E. Bartleet, Esq. (Chipping Campden) .....     | 5  | 5  | 0  |
| T. Heckstall Smith, Esq. (St. Mary Cray) ..... | 5  | 5  | 0  |

Further contributions will be announced.

## Reports of Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 25TH, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

ON THE CONDITION OF THE STOMACH AND INTESTINES IN SCARLATINA.

BY SAMUEL FENWICK, M.D.

The object of this paper was to prove the following propositions:—

1. That the mucous membrane of the oesophagus, stomach, and intestines is inflamed in scarlatina.
2. That desquamation of the epithelium of these parts takes place.
3. That, notwithstanding the anatomical changes in the mucous membrane of the stomach, the formation of pepsine is not prevented.
4. That the condition of the skin is similar to the condition of the mucous membrane in scarlatina.

In support of the first proposition, the microscopic examination of the mucous membranes of the oesophagus, stomach, and intestines, sixteen cases of death from scarlatina were detailed. The first effects of the scarlatina poison upon the gastric mucous membrane were congestion of the bloodvessels, and stripping off the epithelium from the tubes and the surface of the organ, and also softening of the tissues. The tubes are greatly distended by granular and fatty matters, or by small cells intermixed with granules, and in some cases they are lined by a new membrane. Sometimes no normal cells can be distinguished; in other cases they are present, but are scattered irregularly. After the second or third week the tubes are less distended than at an earlier period, and their closed ends are still loaded with granular matters, which greatly obscure the gastric cells. These become more evident towards the surface of the mucous membrane. The cells at this period are sometimes very large, sometimes loaded with fat or coated with granules, and seem to have but little adhesion to their basement membrane, as they readily separate from the tubes, but adhere closely to each other. The effects of the inflammation upon the intestines seem, in slighter cases, to consist in the effusion of granular and fatty matters into the mucous membrane; but in more severe cases the tubes of Lieberkuhn are obstructed by epithelial cells, whilst extravasations of blood take place in the villi, and these, with the rest of the mucous membrane, are loaded with small cells

and granules. In one case the mucous membrane was entirely stripped of villi, excepting a few fragments which still remained, and the enlarged and prominent openings of the follicles of Lieberkuhn gave its surface the appearance of a sieve. In some instances in which the pancreas was examined, evidences of disease presented themselves.

The second proposition was more difficult of proof, as vomiting usually occurs only in the first stage, and the author had no opportunity of examining the vomited matters at this period. In one case, in which the vomiting took place in the third week, fibrinous casts of the stomach-tubes were discovered, and inflammation of the mucous membrane was proved to have existed by *post mortem* examination. The opinion that desquamation of the epithelium occurs was founded chiefly on microscopic examination of the contents of the stomachs of those who had died. The contents in recent cases consisted of pieces of fine membrane, of cells, and of granules and shreds of membrane. The membranes were of the shape and size of the tubes of the stomach, and were covered with granules and fat. The cells varied from 1:1200th to 1:2200th of an inch, and were usually fringed with fine pieces of membrane. In cases of longer duration the membranes were covered with cells, and were also of the size and shape of the stomach tubes. In order to ascertain if these appearances were trustworthy as evidences of inflammation, the contents of the stomachs of forty-five subjects were examined at the Middlesex Hospital, the condition of the mucous membrane being noted. In only one, a case of acute gastritis, were there any fibrinous casts. In eighteen there were only separate cells, chiefly columnar, and in none of these was there inflammatory action. In eight cases casts of the upper parts of the tubes were plentiful, composed only of healthy conical cells; and in all the mucous membrane was in a natural condition. In eighteen there were either plugs formed of cells and granules from the secreting parts of the tubes, or the casts of conical cells were overlaid with granular matters; and in all of these the stomach was more or less inflamed. Two cases of gastritis, unconnected with scarlatina, were also quoted as examples of the forms in which casts of the stomach-tubes appeared in vomited matters during life, and the author stated he had detected casts of the stomach-tubes in matters vomited by persons affected with gastritis connected with diseased kidneys, with inflammatory dyspepsia, and other forms of inflammation of the gastric mucous membrane. It was urged that if casts of the gastric tubes can be discovered during life in cases of gastritis, and if in scarlatina this condition exists, and casts have been found in the stomach after death, there is every probability that desquamation of the epithelium takes place in this organ, as it does in the skin and the kidneys.

In support of the third proposition, the results of the following experiments were given in three cases of scarlatina. Ten grains of hard boiled white of egg were digested at a temperature of 90° for twelve hours in an infusion of the mucous membrane, to which three per cent. of hydrochloric acid had been previously added. The average loss of albumen was three grains and two-thirds. Similar experiments performed with the stomachs of eleven males who died of various diseases at the same hospital gave an average loss of four grains; so that there had been scarcely any diminution of pepsine produced by the fever. In contrast to this were the results of similar experiments upon four cases who died of typhus fever. In two of these the albumen had gained three grains of weight by imbibition, and was not at all softened; whilst in the other two it was softened, and one had lost only half a grain, the other one grain and a half

in weight. But, as the activity of the digestion must depend not only upon the relative amount of pepsine, but also upon the bulk of the mucous membrane, this was also attempted to be estimated. The average weight of the mucous membrane of the stomachs of ten males dying of various diseases at the Middlesex Hospital was eighteen drachms, the weight in two recent cases of scarlatina was eighteen and sixteen drachms (the latter being in a boy), whilst it only amounted to fifteen drachms in one who died in the third week of illness. In four cases of typhoid fever the average weight of the mucous membrane reached only eleven drachms.

The skin had been examined microscopically in three cases only. In the first, in which the patient died after a few days' illness, the only morbid appearance was an occasional minute extravasation of blood in the neighbourhood of the sudoriferous ducts. The rete mucosum was greatly thickened, and numerous round cells with large nuclei were everywhere visible, intermixed with the natural cells. The basement membranes of the sweat-glands were thickened, and the epithelium lining them was so much increased that in most cases it obstructed their channels. In some of the sweat-glands the coils were loaded with coagulated blood, and were greatly and irregularly distended. In the other recent case the appearances were similar, excepting that the external layers of the cuticle were stained with blood in minute patches, and the sweat-ducts were also reddened; but there were no extravasations of blood either in the glands or cutis. In some of the ducts the epithelium was detached from the basement membranes. In the case of a man who died during the third week, the sudoriferous tubes were still choked up, but in the glands the epithelium seemed in many places to be torn away, leaving the basement membranes bare, or only covered by ragged particles. The cutis was in a natural condition.

In scarlatina, the morbid condition is mostly confined, in the first instance, to the basement membranes, and consists in the formation of layers of new cells, which, in the skin, are transformed into cuticle of natural appearance, and in the stomach contain pepsine. If future researches should prove that a similar condition occurs in the kidneys and other parts, it will be necessary to look upon the structural changes produced as resulting from increased physiological, rather than from pathological action.

#### ON THE CAUSES OF HERNIA.

BY J. A. KINGDON, F.R.C.S.

The author endeavoured to prove that hernia was the result of an abnormal condition of the peritoneum in its entirety, either from congenital malformation or inherent disposition to be relaxed; and that it did not arise almost entirely from mechanical causes alone. So long as the mesenteries remained unrelaxed, and with their normal attachments, the author held that hernia not only did not, but could not occur, and that there was no disposable force that could stretch the mesenteries and dislodge the viscera. But when, from congenital defect or subsequent derangement, the mesenteries allowed the intestines to descend in the cavity of the abdomen below their proper sphere, then mechanical causes could act—then the arguments of those who advocated the mechanical theory would apply; protrusion would then be due to loss of equilibrium between the muscular parietes and the rings, but not till then. The author further attempted to show that hernia was fundamentally an affection of the peritoneum generally, by pointing out that the condition of the parietal layer determined the kind of hernia—i.e., the aperture through which it escaped.

## Correspondence.

### THE MEDICAL PROVIDENT FUND.

LETTER FROM B. W. RICHARDSON, M.D.

SIR,—My good and esteemed friend, Dr. Stewart, must pardon me for correcting his too generous speech (reported in your last impression) on my exertions in forwarding the Provident Fund of the Association. In saying that the chief labour of the Committee had been carried out by myself, and that the action of the other members of the Committee had been "nominal", Dr. Stewart attributed to me what I cannot in any sense claim. In the first place, he forgot his own valued services, which were rendered at every meeting of the Committee; and he forgot also those of the other members. Let me, therefore, state that a more active and earnest committee it was never my good fortune before to meet. Sir Charles Hastings, Mr. Bartleet, Mr. Carter of Stroud, Mr. Pound of Odiham, Dr. Bryan of Northampton, and Dr. Day of Stafford, attended, at great cost, the various meetings, and collected most useful information. Mr. Carter, Mr. Pound, and Dr. Stewart were equally partners in the drawing up of the Report, every sentence of which called for the most careful discussion; and Mr. Daniell of Newport Pagnell, and Mr. Gramshaw of Framlingham, sent in various useful and practical facts and suggestions, which were all turned to account.

The whole of the labour was, in a word, fairly divided; and, although it fell to the chairman to be the exponent of the views of the members of the Committee, he can claim and wish for no greater merit than to have been their earnest and willing coadjutor.

I am, etc., B. W. RICHARDSON.

12, Hinde Street, August 14th, 1864.

### THE DERMIC APPLICATION OF MEDICATED STEAM IN THE TREATMENT OF DISEASES OF THE SKIN.

LETTER FROM JOHN GRANTHAM, ESQ., F.R.C.S.

SIR,—In the exercise of our profession, all of us must have more or less experienced difficulty in the treatment of dermic diseases, for want of means, not only in the cottage, but also in the houses of the better classes of life, of applying the most suitable remedies. I allude to the application of heat and moisture, at a high temperature, to the surface of the body, for the relief of pain and disease. I would now direct attention to an economical and easy mode of applying heat and moisture in every house, by means of my "brick bath"; and, first, I wish to admit that the idea emanated from a midwife (who had been a great traveller) in my neighbourhood. She used it as a means of conveying steam or vapour in a case of pruritus pudendi. Nor do I assume this to be the first notice made of the brick bath; but I do claim the merit of being a supporter of the principle, having used it extensively in my practice during the last six or seven years; and I am bound to acknowledge that it has proved to be a most valuable mode of treatment, when combined with sulphur, in all those diseases of the skin coming under the class of watery pimple; and in all the forms of lichen, and also in the suppurative affections of the skin in impetigo, I have witnessed the great palliative powers of the sulphur fume.

The method I have adopted in applying the steam vapour alone is as follows. Boil two gallons of water; at the same time put into the fire half a common



brick, which must be heated to redness; have a cane-bottomed chair, and a hot bath for the feet, with a large blanket, in the room; put the boiling water into an earthen pan, and place it under the chair; then put the red-hot brick into the pan. The patient is to be seated on the chair in a state of nudity, with the feet in the foot-bath; and then to be covered, excepting the head and face, by the blanket. By these means the steam is kept up on the surface of the body for the space of fifteen or twenty minutes; after which, the patient is to be well dried, and retire to a warm bed, or be placed between the blankets. This is a simple steam or vapour bath. When the sulphur fume is required, boil six ounces of sulphur fifteen or twenty minutes in the two gallons of water; or, if an ammonia-bath is required, merely put two ounces of the strong liquid ammonia into the water just before the brick is introduced.

This bath can either be applied generally or locally. I have used it in chronic injuries to the joints; I have applied it, in shock or concussion, to the muscles of the pelvic region, particularly in one very painful case, where a horse fell and lay on the rider without moving him from the saddle, producing not only contusion, but laceration of the muscular fibres. I would, in conclusion, advocate the importance of the great advantage pertaining to the sulphur fume bath, in conjunction with the nitro-muriatic acid treatment; and I might further suggest that, in those chronic affections of the liver, the result of tropical fever, it will be found to be a safe and easy method of passing the nitro-muriatic acid into the skin, thereby proving a very useful adjunct in the treatment of glandular diseases, and in a way and cost accessible to all.

I am, etc., JOHN GRANTHAM.

Crayford, Kent, August 1th, 1861.

## FOREIGN BODIES ON THE SURFACE OF THE EYE.

LETTER FROM JOHN THOMPSON, M.D., F.R.C.S.

SIR,—I quite concur with Mr. Walton, in the remarks contained in his lecture, respecting the great frequency with which foreign bodies are accidentally impacted in the integuments and substance of the eyeball. In fact, there is scarcely an operation so frequently demanded as that, for the removal of these bodies. The patient is almost always conscious of the nature of his case, and able to tell the time and manner of the accident, but sometimes this is not so, and then tact in observation is of service. The particles when impacted in the eyeball are far more frequently in the cornea than the sclerotic, in fact it is quite exceptional to find them in the latter, and in searching on the cornea for them, it is best to look at the eyeball sideways, as small particles are much more plainly visible in this way, than when looked at with the dark structures of the inner eye in the background. Careful examination, with a side view, will in every case enable one to detect the speck. There will be far more difficulty in removing the impacted substances in some cases than in others, according to the depth and firmness of their insertion, and the amount of inflammation that may have been set up.

I have seen surgeons use a lancet, or a needle, or other similarly sharp pointed instrument, and I have myself tried them, but the best sort of instrument is one less pointed than these; I commonly employ a tenotomy knife, which has also the advantage of a long handle, and this allows the operator to rest the ring and little finger on the patient's face, while with the other fingers the instrument is steadily used like

a pen, and the point made to lift or scrape out the foreign body.

The best position for the operator is behind the patient, the latter being seated on a chair, with his head resting against the chest of the surgeon, who places the first and second fingers of the left hand respectively on the upper and under eyelids, raising the former, and depressing the latter at the same time by gently compressing the eyeball, rendering it steady. He may with the flat of the knife touch the eyeball once or twice, then with the point at once strike out the offending body with a few quickly applied touches. By standing thus behind the patient he is steadied, and the movement of his body placed in accord with your own, and as he does not perceive your manipulations, or at most only a very small part of them, the motive for restlessness is small. I once saw a case where the foreign body was a thorn; it pierced the cornea through, and fixed its point in the iris, where it was distinctly visible. It was impossible to get it out through the cornea from the peculiar manner in which it had broken off, and the time which had elapsed since the accident had allowed the point of entrance to close up. Mr. Jones of High Bickington, whose patient he was, very cleverly inserted a couching needle, and depressed the thorn point from the iris into the lower part of the anterior chamber and out of the visual field. The result was most satisfactory; all the bad symptoms were removed, and vision preserved. It is now many years since the operation, and I was informed only a short time since, that no inconvenience was felt in the eye. We see from this how tolerant this part of the eye may be of a coarse irritating substance—pathologically a point of importance. The impacted substance will be generally iron; this is my opinion from observation. Stone-breakers, smiths, and millstone-dressers, are the persons I have found most liable to the accident, more especially the last named. A smith in his work strikes iron against iron, and particles flying off are coarsely flattened discs, not commonly the best shaped for penetrating; but the workers on the millstone strike the iron on hard siliceous masses, which cause sharp angular grains to chip from the chisel, some of which occasionally rebound, and enter the eye, or strike other parts of the body with force, and penetrate the integument. Hence it is not unimportant to inquire how the accident has happened, as indicating the depth of the penetration, and the necessity, probably, of gouging out a portion of the cornea, effectually to remove a sharp angular particle. It is worthy of observation that the skin of the eyelids and face is not often pierced by these particles, it being a very tough elastic tissue, and the same applies in part to the conjunctiva of the sclerotic; but the cornea and its covering, from their different structure, have not the same immunity.

The skin of the wrists and arms of the workmen who dress the millstones is thickened and horny, and it is curious to notice how the particles of iron enter and remain in it. I have seen an arm which looked almost tattooed from this cause; no inconvenience was, however, felt. The arms of blacksmiths I have not known marked in this way, which is corroborative of my former position.

Loose particles of dust and fine grit, flying insects, etc., often require removal from their lodgment within the lids, but I have not often found the conjunctiva pierced; it will occasionally happen, but in reference to frequency, so far as my experience goes, there are ten cases of impaction of iron or other spiculæ in the cornea, to one of impaction of any substance in the conjunctiva of the lids, but this will, perhaps, vary according to the occupation of the population among whom the surgeon practises.

To remove loose particles, a very effectual method is to twist a small strip of lint around a silver probe, and inserting this well up under the lid, wipe the conjunctiva from the outer to the inner canthus, keeping the end of the probe well up to the top of the cavity, and pressing it outwards against the lid as it is brought along. The same process may be adopted for the under lid, with the necessary variation. In case the substance is not removed, and an impaction is suspected, the lid must be inverted, to do which well requires tact, as the probe should be pressed down on the upper lid at the same moment the margin is raised by the eyelash below. The offending body is generally about the middle of the tarsus, and not always very easy to remove, as the conjunctiva bleeds readily, and obscures perception, and the elastic tissue of the lid holds a body with tenacity. I know this the more particularly from having suffered from the accident, and remembering with what difficulty to the operators and pain to myself the offending body was removed. It will be well after inverting so much of the upper lid as is practicable to elevate the cartilage still further, by placing the probe under it; a much freer inspection is thus obtained. With careful observation, a foreign body can scarcely fail to be detected; but it may happen that professional advice has not been sought, the patient believing that he has simply an inflammation in the eye, caused, he may truly think, by the stroke of a bush, or other body, but without being aware that a scale of bark, or a bit of leaf, or filament of wood, may be lodged in the sinus and maintaining the disease. In this, as in other cases of surgery, careful inspection will seldom cause regret, and may often essentially serve the patient, and advance the reputation of the surgeon. The inflammation arising from these accidents is very tractable after the sources of the irritation are removed.

I have made these remarks as an epitome of my experience in an interesting point of surgery. The subject was suggested to me by reading the abstract of Mr. Walton's lecture; but they are not intended to be, in any way, a comment on the lecture.

I am, etc., JOHN THOMPSON.

Bideford, July 19th, 1864.

## THE USE OF SEA-TANGLE IN CONSTRICTION OF THE MEATUS AUDITORIUS.

LETTER FROM E. W. PRITCHARD, M.D.

SIR,—The following case, shewing the use of sea-tangle as a distending agent, may be interesting.

R. F., a native of Edinburgh, and manufacturer, aged 26, had lost the sense of hearing of the right ear, after scarlet fever, seven years previously to coming under my care. He stated that severe inflammation affected both ears at that time; the right being worse, and attended with considerable swelling and profuse suppurative discharge; and that sound seemed gradually to lessen, until it entirely ceased.

The examination at once detected constriction and almost complete obliteration of the right meatus; the integuments being thickened, and the cuticle thickly studded with hairs. The only perceptible aperture was about the twelfth of an inch in length, forming a small oval slit.

Small tents of the *laminaria digitata*, saturated in a weak solution of bromide of potassium, were ordered to be worn from time to time; and a mixture, composed of the infusion of dulcamara and the iodide of potassium, was prescribed, which the patient took daily.

In the course of three months, the opening in the right ear was dilated as large as that in the left; and

the tympanum was easily examined by the speculum. Though his hearing is still imperfect (the watch being heard at two inches distance from the organ), I have little doubt of the ultimate complete restoration. The ease with which the tangle-tents are made, increasing them in bulk from time to time, and the absence of pain in their use, recommend it strongly to the favourable consideration of aural surgery.

I am, etc., EDWARD W. PRITCHARD.

Glasgow, August 1864.

## Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 28th.

Arglis, Frank, Maidstone  
Brend, Alfred, L.S.A., Bideford, Devon  
Camley, Vaughan, Hull  
Colman, Thomas John, Bristol  
Dubb, Edward Napier, Sheffield  
Fennings, Allen, Islington  
Field, Albert, Bradford  
Gentle, Peter Hume, M.D. Edin., Inverness  
Hill, Philip Edward, Cardiff  
Leach, John Comyns, Crediton, Devon  
Lever, Edward Kelsal, L.S.A., Paduham, near Burnley  
M'Mahon, James T., L.S.A., Rochester Terrace, Camden Town  
Nash, Edmund, Kensington  
Newstead, Charles Vincent, Otley, Yorkshire  
Philips, Philip George, L.S.A., Bayswater  
Powell, Llewellyn, New Zealand  
Pullan, Henry William, Epworth, near Bawtry  
Sheldon, William, M.D. Edin., Stratford-on-Avon  
Somerset, William Porter, Claydon, Bucks  
Taylor, Francis Thomas, Deptford  
Whidborne, George Herbert, Guildford Street  
Woodcock, John Rostrow, Manchester

### Admitted on July 29th—

Arnott, Henry, Cheltenham  
Carpenter, Edward, L.S.A., Lambeth  
Carreg, Griffith Llewelyn, Carnarvon  
Constantinides, Petros, M.B., Canada  
De Zouche, Isaiah, Pennsylvania  
Ellis, Thomas Edward Charles, Bexley Heath  
Evans, Alfred Paget, L.S.A., West Bromwich  
Fothergill, Thomas Prince, Bedale, Yorkshire  
Fraser, John Martin, M.D., Canada  
Haigh, Thomas Hinchcliffe, L.S.A., Huddersfield  
Hingston, Charles Albert, Plymouth  
Jones, John William, Bangor  
Kelly, James, M.D., Clare, Ireland  
Locking, Benjamin, Hull  
McClure, Andrew Allan, M.D., Pennsylvania  
Metcalf, Fenwick, Wisbeach  
Shane, Richard Lewis, L.S.A., Great Marlow  
Swann, William Booth, Leeds  
Talbot, Richard, Limehouse

### Admitted on July 30th—

Bam, John William Devereux, Blackwall  
Blewitt, Byron, Algiers  
Bryant, William Hicks, Plymouth  
Hallett, Thomas George Palmer, Langport  
Leadingham, James, M.D., M.C. and M.A., Aberdeen  
Macpherson, Robert Nasmyth  
Miller, Reuben Zeecheus, Richmond  
Moreton, Thomas Peyton, Leitrim  
Powles, William, Strand

The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on August 8th.

Field, Octavius Adolphus, Sussex Gardens, Hyde Park; diploma of membership dated August 12th, 1836  
Yeo, Gerald, Royal Navy; December 21th, 1841

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH. (Double Qualification.) The following gentlemen passed their first professional examinations during the recent sittings of the examiners.

Beamish, Thomas, Cork  
Burt, David A., Fifehire  
Burton, John, Staffordshire



Catherwood, William Alister, Donaghadee  
 Charteris, William, Dumfriesshire  
 Clapperton, James, Queen's County  
 Davies, John, Dublin  
 Hague, Samuel, Ashton-under-Lyne  
 Jones, David Joshua, Carmarthenshire  
 Murray, George H., Dumfriesshire  
 Mitchell, John, Forfarshire  
 O'Brien, Richard, Ennis  
 Patchett, Henry, Blackburn  
 Rockett, Joseph H., Yorkshire

And the following gentlemen passed their final examinations, and were admitted L.R.C.P. Edinburgh, and L.R.C.S. Edinburgh.

Arrowsmith, William Hixon, County Durham  
 Austin, Thomas Mein, Edinburgh  
 Brown, Andrew, Biggar  
 Buckley, Cornelius, Skibbereen  
 Carrick, George Lion, Croustadt  
 Clarke, Alexander, Campsie  
 Clarkson, Charles Howard, East Indies  
 Dickson, Frank Kennedy, Edinburgh  
 Elmslie, William Jackson, Aberdeen  
 Hepburn, William Joseph, Dublin  
 Hughes, David Erskine, Edinburgh  
 Jackson, Joseph, Cumberland  
 James, Henry Northage Land, Derbyshire  
 King, Thomas Radford, Sussex  
 Kynock, Patrick, Roxburgh  
 McCraith, Edward, County Cork  
 McDonnell, Joseph, Roscommon  
 Macgregor, Donald, Perthshire  
 Nicholls, Austin Huitson, Dublin  
 O'Connor, Thomas James Haines, County Cork  
 Purves, Henry Black, Kelso  
 Purves, William Laidlaw, Edinburgh  
 Robertson, Schœdte, Athlone  
 Stone, Valentine, Brechin  
 Thompson, William Ballin, Kerry  
 Walsh, David John, County Cork  
 Wheeler, Edwin, Belfast  
 White, Francis Buchanan White, Perth

ROYAL COLLEGE OF SURGEONS, EDINBURGH. The following gentlemen passed their first professional examinations during the recent sittings of the examiners.

George, John, Carrickfergus  
 Gilmer, Robert, County Antrim  
 McIlroy, James, Bushmills, Ireland  
 McNicol, John Clark, Argyllshire  
 Williams, R. Gilbert, Kinsale  
 Young, Alexander, Portlennie

And the following gentlemen passed their final examinations, and were admitted licentiates of the College.

Alston, James Montgomerie, Glasgow  
 Anderson, Alexander M., Perthshire  
 Anderson, Robert, Haddingtonshire  
 Bodkin, Christopher Patrick, County Galway  
 Brims, James, Caithness  
 Campbell, William, Fort William  
 Crichton, James Smith, Arbroath  
 Cunningham, Robert Oliver, Prestonpans  
 Daly, Frederick, County Cork  
 Foley, James Charles, County Cork  
 Gillespie, Humphrey Carden, Cork  
 Gunn, Robert, Caithness  
 Irvine, William Skipton, Londonderry  
 McAndrew, Andrew Watson, Orkney  
 McCloskey, Joseph Richard, Londonderry  
 McGregor, John, Caithness  
 McLeod, Kenneth, North Uist  
 McNeil, William, Wigtownshire  
 Moffat, John, Isle of Man  
 O'Keeffe, Patrick, County Cork  
 Orr, John, Glasgow  
 Porter, Angus M'Kay, Belfast  
 Robinson, Cuthbert Henry, Yorkshire  
 Telford, David William, County Antrim  
 Thomson, Robert Bremner, Fochabers  
 Thorburn, David Arno Smet, Florence  
 Turnbull, George Hogarth, Roxburghshire  
 Wright, Robert, Edinburgh

APOTHECARIES' HALL. On August 11th, the following Licentiates were admitted:—

Barrett, Joseph William, Eton, Bucks  
 Lowndes, James Matthew, 213, New Kent Road  
 Snook, James Walbridge, St. Bartholomew's Hospital

At the same Court, the following passed the first examination:—

Dunn, John Roberts, Middlesex Hospital  
 Marshall, Frederick, King's College Hospital

ARMY MEDICAL SERVICE. The following is a list of the candidates who were successful at the Competitive Examinations in February and March last, and who have passed through a course at the Army Medical School; and shows the combined results of the examination, the place of study, and the number of marks obtained by each candidate.

| Names.                     | Studied at            | No. Marks. |
|----------------------------|-----------------------|------------|
| Wallace, John, M.D.        | Edinburgh             | 5064       |
| Jobson, William, M.D.      | Edinburgh             | 4755       |
| Fleming, Josh., M.D.       | Glasgow               | 4784       |
| Atkinson, Warner           | New College, London   | 4547       |
| Phillips, H. H., M.B.      | Dublin                | 4486       |
| Orwin, Thomas William      | London                | 4447       |
| Hickson, R. C. C.          | Dublin                | 4157       |
| Bolster, Thomas G., M.D.   | Dublin and Cork       | 4121       |
| Melladew, H. F. L., M.D.   | London and Edinb.     | 3981       |
| Middleton, John, M.D.      | Edinburgh             | 3956       |
| Finegan, B. J.             | Dublin                | 3880       |
| Leslie, D. A., M.D.        | Aberdeen              | 3789       |
| Muir, H. S., M.D.          | Glasgow               | 3765       |
| Maxham, John William, M.D. | Edinburgh             | 3642       |
| Hyde, Robert               | Dublin                | 3628       |
| Barrow, Thomas S., M.D.    | London                | 3611       |
| Cogan, Michael             | Dublin                | 3594       |
| Turner, Richard, M.D.      | London and Edinb.     | 3578       |
| Churchill, C. F., M.B.     | Dublin                | 3466       |
| Babington, T.              | Dublin                | 3486       |
| Ambrose, John, M.D.        | Cork                  | 3479       |
| Atkinson, James            | Dublin                | 3435       |
| Anderson, John             | Manchester            | 3402       |
| Johnson, Francis, M.B.     | Dublin                | 3335       |
| Minty, Alexander, M.B.     | Aberdeen              | 3306       |
| Atkinson, George, M.B.     | Dublin                | 3292       |
| Burke, James               | Dublin                | 3257       |
| Gray, John, M.D.           | Aberdeen              | 3226       |
| Malcolm, J. V. T., M.D.    | Edinburgh             | 3226       |
| Kirkwood, T. M.            | Dublin                | 3157       |
| Watts, A. N.               | London                | 3119       |
| Davies, R. W.              | London                | 3091       |
| Woolley, George F.         | Dublin                | 3073       |
| Dundlop, Robert            | London                | 3066       |
| Stock, John N.             | Dublin                | 3035       |
| Ball, John Josh., M.D.     | Dublin                | 3030       |
| King, James George         | London                | 2975       |
| Lithgow, A. M. S., M.D.    | Edin., Glasg. & Paris | 2964       |
| Ross, D. P., M.D.          | Edinburgh             | 2960       |

## APPOINTMENTS.

### ARMY.

BARKER, Staff-Assistant-Surgeon J., to be Assistant-Surgeon 1st Foot, *vice* M. L. White.  
 BELCHER, Staff-Assistant-Surgeon J. W., M.D., to be Assistant-Surgeon Royal Artillery.  
 CLARKE, Staff-Surgeon J., M.D., to be Surgeon, *vice* Surgeon-Major T. R. Dyce.  
 CLERY, Staff-Assistant-Surgeon G. C., to be Assistant-Surgeon Royal Artillery.  
 CUMMING, Staff-Assistant-Surgeon K. W., M.D., to be Assistant-Surgeon Royal Artillery.  
 DEVLIN, Assistant-Surgeon H. W., 41th Foot, to be Assistant-Surgeon Royal Artillery.  
 DREW, Staff-Assistant-Surgeon E., to be Assistant-Surgeon Royal Artillery.  
 FASSON, Surgeon C. H., 17th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.  
 FERGUSON, Staff-Assistant-Surgeon R. P., to be Assistant-Surgeon Royal Artillery.  
 FORSAYETH, Staff-Assistant-Surgeon R. W., to be Assistant-Surgeon 95th Foot, *vice* J. Watt, M.D.  
 GREENE, Staff-Assistant-Surgeon H. R., to be Assistant-Surgeon, *vice* H. W. Devlin.  
 GRAY, Staff-Assistant-Surgeon C., to be Assistant-Surgeon Royal Artillery.  
 GRIFFIN, Staff-Assistant-Surgeon M. J., to be Assistant-Surgeon 3rd Dragoon Guards, *vice* St. John Stanley.  
 HILLMAN, Staff-Assistant-Surgeon W., to be Assistant-Surgeon Royal Artillery.  
 JEPHSON, Surgeon W. H., M.D., 1st Dragoon Guards, to be Surgeon-Major, having completed twenty years' full-pay service.  
 JOHNSON, Staff-Assistant-Surgeon Y. H., to be Assistant-Surgeon Royal Artillery.  
 LEACH, Staff-Assistant-Surgeon W., to be Assistant-Surgeon Royal Artillery.  
 M'ADAM, Staff-Assistant-Surgeon J. S., to be Assistant-Surgeon Royal Artillery.  
 MACLEAN, Staff-Assistant-Surgeon H. H., to be Assistant-Surgeon Royal Artillery.  
 MAUNSELL, Staff-Assistant-Surgeon C. A., M.D., to be Assistant-Surgeon Royal Artillery.  
 MILES, Staff-Assistant-Surgeon W., to be Assistant-Surgeon Royal Artillery.  
 NICHOLSON, Staff-Assistant-Surgeon E., to be Assistant-Surgeon Royal Artillery.

OWEN, Staff-Assistant-Surgeon R. J., M.D., to be Assistant-Surgeon Royal Artillery.  
 PARRIS, Staff-Assistant-Surgeon E. J., to be Assistant-Surgeon Royal Artillery.  
 RANDOLPH, Staff-Assistant-Surgeon H. L., to be Assistant-Surgeon Royal Artillery.  
 RICKETTS, Assistant-Surgeon C., 7th Foot, to be Assistant-Surgeon Royal Artillery.  
 RUTHERFORD, Staff-Assistant-Surgeon J., M.B., to be Assistant-Surgeon Royal Artillery.  
 SALTER, Assistant-Surgeon J. D., 9th Foot, to be Assistant-Surgeon Royal Artillery.  
 SHARKEY, Staff-Assistant-Surgeon T., to be Assistant-Surgeon Royal Artillery.  
 STANLEY, Assistant-Surgeon St. John, 3rd Dragoon Guards, to be Staff-Surgeon, vice J. Clarke.  
 WALL, Assistant-Surgeon J., M.D., 9th Foot, to be Assistant-Surgeon Royal Artillery.  
 WHITE, Assistant-Surgeon M. L., 1st Foot, to be Assistant-Surgeon Royal Artillery.  
 WRIGHT, G. A. W., M.D., to be Staff-Assistant-Surgeon.

To be Acting Assistant-Surgeons:—

BOWER, W. E., Esq.  
 BROCK, W. K., Esq.  
 DEBRANT, W., Esq.  
 FENTON, W. F., Esq.  
 FITZGERALD, R., Esq.  
 GARNSEY, J. B., Esq.  
 GAVEN, J. A., Esq.  
 KEOGH, E. A., M.D.  
 MURPHY, A., Esq.  
 ROE, J. A., Esq.

INDIAN ARMY.

CHRISTISON, Assistant-Surg. A., M.D., to be Surgeon Bengal Army.  
 CUNNINGHAM, Assistant-Surg. J. M., to be Surgeon Bengal Army.  
 DONALDSON, Assistant-Surg. J., M.D., to be Surgeon Madras Army.  
 THORNTON, Assistant-Surgeon J. K., to be Surgeon Madras Army.  
 TRIMMELL, Assistant-Surgeon G. F., to be Surgeon Madras Army.

DEATHS.

ANDREWS, T., Esq., Surgeon, at Canterbury, aged 59, on August 6.  
 BLOXAM. On August 10th, at Ryde, Rose, infant daughter of J. C. Bloxam, M.D.  
 \*BUTCHAM, William, Esq., of Brigham, Yorkshire, and Lyman, Cheshire, in London, on July 27.  
 BROWN. On August 17th, aged 17, Annie Letitia, youngest daughter of \*J. Baker Brown, Esq., of Cornchurch Square.  
 CAMPBELL, John C., M.D., late 4th Light Dragoons, at Stanley Hall, Gloucestershire, on August 9.  
 COMELY, George, Esq., Surgeon, of Headley, Hants, at Winchester, aged 35, on August 1.  
 FRANCES. On August 13th, at Acton, aged 57, Jennette, wife of Thomas Francis, Esq., Surgeon.  
 GALEN. On August 13th, at Aberdeen, Margaret Smith, widow of John Galen, M.D.  
 GILCHRIST, Archibald, M.D., B.N., at Carluke, N.B., on August 1.  
 KING, George, Esq., formerly of Bath, at the Royal Medical College, Epsom, aged 73, on August 11.  
 MOON. On August 14th, at Brighton, Mary Anne, wife of William Moon, Esq.  
 PRATT, Charles E., M.D., at Appledore, North Devon, aged 70, on July 25.  
 TAYLOR, Charles G., Esq., Surgeon, at Stratford, Essex, on Aug. 14.  
 WRENNAN, Peter R. W., Esq., Surgeon, at Bryn Hyfryd, Llangatock, Brecknockshire, aged 73, lately.  
 WALKER. On August 14th, at Manchester, aged 33, Elizabeth, wife of Robert Walker, M.D.  
 WOOD. On July 18th, at Halifax, Harriet J., wife of John G. Wood, M.D., Staff-Surgeon-Major.

BRITISH PHARMACEUTICAL CONFERENCE. The meetings for the present year will be held at Bath, on September 14th.

INFANTICIDE IN LONDON. Official reports show that during the year 1861, there were held 1,103 inquests on children which had died violent deaths.

THE OUTRAGE ON DR. ROWE. J. Brice and J. Scott have been sentenced to eighteen months' imprisonment with hard labour for their brutal attack upon Dr. Rowe of Liverpool. They were found guilty of wounding with intent to do grievous bodily harm.

VISIT OF THE QUEEN TO NETLEY. On the 13th inst., the Queen visited the Royal Victoria Hospital at Netley, accompanied by his Royal Highness Prince Louis of Hesse, Earl Russell, etc. Her Majesty was received at the hospital by Colonel Wilbraham, the Commandant; the principal medical officer, and the staff of the establishment. The Queen went through the different wards, and inspected the wounded men right *et* come home from New Zealand.

BEQUESTS. The late Dr. Don of Bearehill, bequeathed £1,000 towards raising a hospital at Brechin, provided another £1,000 were raised. Lord Dalhousie has promised £100, and Sir J. Campbell £100 towards the second thousand. The late Andrew M. Drummond, Esq., has left by will £100 to the South Devon and East Cornwall Hospital, Plymouth.

EFFECT OF OIL OF WORMWOOD. M. Marcé has lately given an account of some experiments, which prove that oil of wormwood, in doses of from three to eight grammes, produces poisonous, but not fatal, effects. Trembling, stupor, and insensibility are produced, with epileptic convulsions and stertorous breathing. The experiments throw some light on the nervous symptoms which follow the excessive use of *absinthe*.

THE NIGHTINGALE FUND. From the annual report it appeared that fifteen probationers were under training at St. Thomas's Hospital for nurses. Altogether, thirty-four probationers had left the school to take service in various hospitals and infirmaries. The demand for trained hospital nurses had increased, and was even greater than could be supplied. At King's College Hospital, under the superintendence of the authorities of St. John's House Training Institution for Nurses, the school for training midwifery nurses to be employed exclusively among the poor had made satisfactory progress. Ten women had completed their training during the past year. These were employed nearly all in country parishes, with the sanction of the resident clergy and medical men, and either under their immediate direction or that of some resident lady.

QUEEN'S COLLEGE, BIRMINGHAM. The academical year terminated on July 31st. Forty-two students had been registered during the past session. The honoraria have been awarded to the following students. *Anatomy*. Thomas, medal and certificate; Sawyer, second certificate. *Anatomical Demonstrations*. Thomas, medal and certificate; Sawyer, second certificate. *Chemistry*. Snow, medal and certificate; Beech, second certificate. *Medicine and Pathology*. Mackey, medal and certificate; Bousefield, second certificate. *Physiology*. Thomas, medal and certificate; Sawyer, second certificate. *Surgery*. Mackey, Bousefield, *eq.*, medals and certificates. *Summer Session*.—*Botany*. Snow, medal and certificate; Beech, second certificate. *Practical Chemistry*. Snow, medal and certificate; Beech, certificate. *Forensic Medicine*. Thomas, medal and certificate; Bennett, second certificate. *Materia Medica*. Sawyer, medal and certificate; Witherington, second certificate. *Midwifery*. Sawyer, medal and certificate; Witherington, certificate.

THE FLUSHING LUNACY CASE. At the recent Cornwall Assizes, Samuel Porter was placed at the bar to receive sentence in regard to the charge of having cruelly ill-used his half-witted brother. Mr. Justice Byles said that the circumstances of the case were such as one could scarcely believe could have occurred in England, that a human being could have been kept eleven years in a village containing a considerable number of inhabitants, in such a state of filth and neglect as one would scarcely keep a common domestic animal; that for years he should never have been seen, and his existence be almost unknown; and that the gentleman, by whose exertions the matter was brought to light, should have had considerable difficulty in ascertaining his existence and the nature of his custody. The jury had commended the prisoner to the merciful consideration of the Court. He (Mr. Justice Byles) understood the ground of this recommendation. It was proved that the supply of food to the lunatic was abundant; his appetite was probably more like that of an inferior animal



than that of a rational human being. Everything used by the family was freely and liberally supplied to him; he had a full share of all. Also there was no suggestion or reason to believe that any violence or cruelty had been used towards him. His Lordship concluded by passing a sentence of nine months' imprisonment.

**CALABAR BEANS POISONING.** Last week in Liverpool, sixty children were poisoned by eating some Calabar beans. It appears that a little girl was taken to the Southern Hospital by some women. The child was in great suffering, and the surgeons of the hospital were informed that she had been eating some beans, which she had gathered from a heap of rubbish. Dr. Cameron, and Drs. Wollaston and Evans, immediately attended the child; but before they had time to administer the remedies considered necessary for her, about twenty other persons arrived with children in their arms suffering in a similar way. The medical gentlemen found that the children were evidently suffering from a narcotic irritant poison. The poor children seemed to be suffering acutely from pain, and many of them were retching violently. From 1 to half-past 3 o'clock about forty children were taken to the hospital. One of them, named Michael Russell, six years of age, died about ten minutes after he was admitted. This is the only case, up to the present, where fatal results have occurred, but several of the children are not by any means out of danger. The consequences would, no doubt, have been much more serious had it not been for the prompt remedies applied. The symptoms which the children exhibited were somewhat peculiar. The children were pale, very sick, and exhausted, and when they attempted to walk they staggered about as if they were drunk, although they had the use of all their senses, the poison which they had taken evidently not producing that stupefying effect which results from the taking of opium. Their pulsation was at first very low; some of them became feverish and drowsy, and their eyes were bright and protruding from the sockets, and in some of the worst cases the pupil of the eye was contracted. The quantity of the beans which the children stated they had eaten produced somewhat different effects. In one case, where a girl had eaten twelve, her recovery was early accomplished; whereas in the case of another child, who stated that she had only eaten two beans, it was for some time feared that fatal results would follow. The child who died ate, it is stated, only six of the beans. The children found the beans in a load of rubbish. The little things ate some of the beans, as they had not an unpleasant taste. The news of the discovery quickly spread among the children in the locality, and a number joined in the search and partook of the beans. Subsequently the rubbish was riddled, when upwards of a bushel of the beans was obtained. The rubbish is said to be ship sweepings and ballast taken from a vessel which has just arrived from the West Coast of Africa. (*Liverpool Mercury.*)

**ARMY MEDICAL SCHOOL.** The following were the questions proposed at the close of the eighth session of the Army Medical School, Royal Victoria Hospital, Netley, between July 26th and August 3rd, 1864. *A. Written Questions.* *I. Military Surgery.* 1. Mention the several purposes for which the convex and concave spectacles are supplied in the regimental optical and ophthalmoscopic case of instruments; and describe the method of using them, in conjunction with the test-types, for distinguishing emmetropia, myopia, hypermetropia, whether simple, or complicated with presbyopia or amblyopia. Explain the theory on which the diagnosis in each instance is established. 2. Describe the nature, effects, and

proper treatment of osteo-myelitis after gun-shot injuries of long bones, or of amputations consequent upon them. 3. Describe accurately, step by step, the operations of excising the shoulder- and elbow-joints, each by a single linear incision, as practised in the *post mortem* room. *II. Military Medicine.* 1. From what date may cholera be said to have engrafted itself on the epidemics of the soil of India? What are the conditions which appear to act most powerfully as predisposing causes of the disease? What influence do high or low situations respectively exert (a) on the proportionate mortality of those attacked; (b) on the proportionate number of those seized. Explain in what way excessively long marches appear to increase the virulence of an epidemic of this disease in soldiers, native or European, in India. Give an accurate description of the premonitory and actual symptoms (a) in the slight, (b) in the severe forms of the disease; and describe the effects of its presence on the blood and secretions. What are the chief points to keep in view in our endeavour to exclude this disease from garrisons, camps, and cantonments; and to mitigate the severity of an epidemic, when it appears? Give a description of the most rational treatment (a) in the premonitory; (b) in the confirmed; (c) in the state of febrile reaction; particularly stating in what stage and to what extent opium is useful and safe. 2. What is the average weight of the liver, in health, in a man between the ages of 18 and 40? Describe accurately its normal position and limits. Explain the most common causes of abnormal position of the gland. Give the precautions necessary to accuracy in the use of percussion and palpation in investigating hepatic disease. 3. Give as complete an account as you can of the therapeutic uses and value of ipecacuanha in tropical medicine. *III. Military Hygiene.* 1. What are the chief cases and effects of impurity of air in the habitations of men? 2. How would you determine the amount of carbonic acid, watery vapour, and suspended matters, in the air? 3. Enumerate the principal adulterations of wheat flour, and state how you would determine (a) the quality of the flour; (b) the presence of pea flour, oats, and maize. 4. What has been the medical history of the West Indies, as far as Europeans are concerned? State explicitly what you would do in a West Indian station, if there occurred (a) a considerable yearly number of diarrhoeal and dysenteric cases; (b) a considerable number of admissions from typhoid fever; (c) a number of admissions from paroxysmal fever; (d) occasional outbreaks of yellow fever. *IV. Pathology.* 1. Give a classified account of the lesions in the kidney which were demonstrated during the past session in the practical room. 2. Describe the nature and probable origin of the parasitic cyst in the liver, which proved fatal in the case of Private ———, as shown at the *post mortem* examination of June 28th, 1864. 3. Mention the period of incubation, and describe the course and progress, of an infecting venereal sore; and contrast your account with similar details relative to venereal sores which do not infect the system. *B. Practical Examination.* *I. Military Surgery;* and *II. Military Medicine.* Make an examination of the case of ———. Write concisely a history of the case, your diagnosis, prognosis, the probable effects of treatment, and the influence of the disease or injury on the man's fitness for service as a soldier. (Twenty minutes allowed for the examination, half an hour for the description.) *III. Hygiene.* Examination of two specimens of water. Examination of adulterated milk and adulterated beer. Microscopical examination of adulterated wheat flour. *IV. Pathology.* Description of various preparations and microscopic specimens, and examination of secretions.

## OPERATION DAYS AT THE HOSPITALS.

|              |  |
|--------------|--|
| MONDAY.....  | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| TUESDAY....  | Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| WEDNESDAY... | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.   |
| THURSDAY.... | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.   |
| FRIDAY.....  | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY.... | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

## TO CORRESPONDENTS.

\* All letters and communications for the JOURNAL to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

A CORRESPONDENT writes:—"I am 35 years of age, and have been in the medical profession all my life, but have never yet had an opportunity of obtaining a diploma. My friends are very anxious that I should graduate now; and I wish to know whether I can obtain a degree without going through the tedious formula of three years attendance on lectures. I may say that I am well up in practical surgery and midwifery."

THE LATE MR. EDGAR BULL.—The Rev. H. Bromfield gratefully acknowledges the receipt of the following donations for the widow and children of the late Edgar Bull, Esq., Surgeon, of Blockley; and earnestly solicits further assistance.—E. H. Evans, Esq. (Mordmouth), 2s. 6d.; A Friend (Paris), 2s. 11d.; Dr. Prichard (Abington Abbey), £3. 3; W. Percival, Esq. (Northampton), 10s. 6d.; Dr. Ramsay (London), £1. 1; Mrs. Spencer Thomson (Burton-on-Trent), 5s.; Dr. Dale (Bayswater), 5s.; Edwin Bartlett, Esq. (Chipping Campden), £1. 1; From "Shaw" (Oldham), 10s.; Dr. Hildige (Dublin), £1. 1; Dr. Bull (Hereford), £1. 1; Dr. Hunter Finlay (Glasgow), 2s. 6d.; B. Brooks, Esq. (London), 5s.; Admiral Collier, C.B. (Blockley), £1; Thomas M. Kendall, Esq. (King's Lynn), 10s.; Dr. Jeaffreson (London), £1. 1; Dr. Oldham (London), £1. 1; Dr. Herbert Davies (London), £1. 1; Dr. Risdon Bennett (London), £1. 1; Peter Gowland, Esq. (London), £1. 1; John Hilton, Esq. (London), £1. 1; J. L. Esq. (London), £1. 1; Dr. Dudley (London), £1. 1; Drs. Sewell and Crosby (London), £1. 1; Dr. Sparke (London), £1. 1; Cambria (Boston), 10s.; D. F. Stevens, Esq. (St. Ives), 10s.; C. F. G. & J. M., 5s.; J. J. Mason, Esq. (Stratford-on-Avon), £1. 1; P. E. (Berkhamstead), £2. (Blockley Vicarage, Moreton-in-Marsh, August 1864.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Dr. A. T. Brett (Watford), 10s. 6d.; G. Harday, Esq. (Rugby), 5s.

Amount previously announced, £52.8. Received at the Lancet office, £3.11. I am, etc., ROBERT FOWLER, M.D., Treasurer and Hon. Sec.

145, Bishopsgate Street Without, August 17th, 1864.

COMMUNICATIONS have been received from:—MR. GEORGE NAYLER; DR. G. BUCHANAN; DR. KINGLAKE; DR. C. KIDD; THE DIRECTOR-GENERAL OF THE ARMY MEDICAL SERVICE; MR. T. P. TEALE, JUN.; DR. FALCONER; DR. R. W. RICHARDSON; MR. J. VOSÉ SOLOMON; MR. JAMES ROBERTSON; DR. E. J. THOMPSON; MR. JOHN GRANTHAM; MR. R. B. CARTER; MR. G. E. STANGER; DR. G. H. PHILIPSON; DR. FAYRER; MR. T. MARTIN; DR. GIBB; MR. WEBB; DR. FOWLER; and DR. C. HARRISON.

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## Profitable Investment.—A few

Gentlemen now forming an Association, under the law of limited liability, for the Advance and Investment of Money, require others to unite with them. Persons who are disposed to embark from £50 to £500 in such an undertaking, are invited to communicate with P. J., care of Messrs. STREET Brothers, 11, Serle Street, Lincoln's Inn Fields, W.C.

## St. George's Hospital Medical

SCHOOL.—SESSION 1864-5.—THE WINTER COURSE of Instruction will commence on Monday, October 3rd, with an Introductory Address by Dr. OGLE, at 2 p.m.

Physicians—Dr. Page, Dr. Pittman, Dr. Fuller, Dr. Barclay. Assistant-Physicians—Dr. Ogle, Dr. Wadham. Consulting Surgeons—Mr. Cæsar Hawkins, Mr. Cutler. Surgeons—Mr. Tatum, Mr. Hewett, Mr. Pollock, Mr. Henry Lee. Assistant-Surgeons—Mr. Holmes, Mr. Brodhurst.

## LECTURERS.

Descriptive and Surgical Anatomy—Mr. Holmes and Mr. Rouse. Physiology and Comparative Anatomy—Dr. Wm. Ogle. Chemistry—Dr. Noad, F.R.S. Medicine—Dr. Pitman. Surgery—Mr. Tatum. Pathology—Dr. Ogle and Mr. Henry Lee.

On the payment of £100 a pupil becomes perpetual to the Practice of the Physicians and Surgeons and to all Lectures, may compete for all Prizes, Exhibitions, and for the office of House-Surgeon, and may become Clinical Clerk and Dresser, for two periods of three months each.

On the payment of £90—£45 paid at the commencement of the first Winter Session, and £45 the second Winter Session—a pupil is admitted to the Hospital Practice and Lectures required by the various Examining Bodies.

Gentlemen can enter to the Hospital Practice and Lectures separately.

The Hospital contains 350 beds. Clinical Lectures are delivered by the Physicians and Surgeons every week.

A MATERNITY DEPARTMENT, for the delivery of married lying-in women at their own homes, is established at the Hospital, with a Ward for the reception of women suffering under diseases peculiar to the sex.

The William Brown Exhibition, of Forty Pounds per annum, tenable for three years, will be bestowed on the candidate who shall show the best general fitness for the exercise of the Medical Profession, and whose moral conduct shall in all respects be satisfactory.

The following Prizes will be awarded at the termination of the Session:—

Sir Charles Clarke's Prize for Good Conduct.

The Thompson Medal.

Sir Benjamin Brodie's Clinical Prize in Surgery.

The Lewis Powell Clinical Prize in Medicine.

The Henry Charles Johnson Memorial Prize in Anatomy.

A general Examination will be held at the end of the Summer Session, and a certificate of proficiency will be given to each pupil who passes to the satisfaction of the Examiners, and the following Prizes to the most distinguished, viz.:—

A Prize of Ten Guineas to pupils in their first year.

A Prize of Ten Guineas to pupils in their second year.

A Prize of Ten Guineas to pupils in their third year.

Further information may be obtained from Dr. Barclay, the Treasurer of the School, from any of the Lecturers, or from Mr. Hammerton, at the Hospital.

## St. Bartholomew's Hospital and

MEDICAL COLLEGE.—THE WINTER SESSION will COMMENCE OCT. 3, with an Introductory Address by Mr. Callender, at 5 o'clock p.m.

## LECTURES.

Medicine—Dr. Black and Dr. Kirkes.

Surgery—Mr. Lawrence and Mr. Cooté.

Descriptive Anatomy—Mr. Skey and Mr. Holden.

Physiology and General Anatomy—Mr. Savory.

Chemistry—Dr. Odling.

Demonstrators of Anatomy—Mr. Callender and Mr. Smith.

Demonstrator of Morbid Anatomy—Dr. Andrew.

SUMMER SESSION, commencing May 1, 1865.

Maternal Medicine—Dr. Farre.

Botany—Dr. Morris.

Forensic Medicine—Dr. Martin.

Midwifery—Dr. Greenhalgh.

Comparative Anatomy—Mr. Callender.

Practical Chemistry—Dr. Odling.

The Hospital contains 650 beds, and Clinical Lectures are delivered—On the Medical Cases, by Dr. Farre, Dr. Black, and Dr. Kirkes; on the Surgical Cases, by Mr. Lawrence, Mr. Paget, and Mr. Cooté; and on Diseases of Women, by Dr. Greenhalgh.

Collegiate Establishment.—Students can reside within the Hospital walls, subject to the collegiate regulations. Some of the teachers connected with the Hospital also receive students to reside with them.

Seven Scholarships, varying in value from £20 to £50, are awarded annually. Further information respecting these and other details may be obtained from Dr. Edwards, Mr. Callender, or any of the Medical or Surgical Officers or Lecturers; or at the Anatomical Museum on duty.



# Clinical Lecture

ON

## SCARLATINA AFTER OPERATIONS.

DELIVERED AT

ST. BARTHOLOMEW'S HOSPITAL, 1863.

BY

JAMES PAGET, ESQ., F.R.S.

MR. PAGET, referring, in the course of a clinical lecture, to a case of lithotomy recently under his care in the hospital, said :

The boy lately operated on for stone had scarlatina ; at least, an eruption exactly like that of scarlatina appeared over nearly the whole surface on the day after the operation, with general febrile disturbance. Two days later, it began to fade ; and in a few days had disappeared, and left him in about the same state that we may suppose he would have been in if no such illness had occurred. All went on well for a month ; the wound was nearly healed : and he was deemed convalescent, when, perhaps in consequence of exposure to cold, he had severe pain in passing urine, and evacuated with it a considerable quantity of blood from the kidneys, and tenacious mucus. Two days after this, he had sore-throat ; then an eruption, like scarlet fever, again appeared : it continued for three days, and was succeeded by desquamation. The urine in about ten days had gradually regained its natural condition, and he again seemed well. But now whooping-cough set in, and again retarded, though it did not finally prevent, recovery.

If I had never seen a case similar to this, I should have hesitated to call it scarlatina ; for the symptoms of the first attack were very incomplete, and those of the second were unusual and disorderly. But I believe the case was really one of scarlatina, modified by the circumstances in which it occurred ; and that it may be reckoned with other similar cases in illustration of some interesting general principles.

About this time last year, when scarlatina was very prevalent, I saw six cases after operations in private practice ; I have notes of four more that occurred either before or since ; and I have heard of many more. By some, these cases may be supposed to have been only casual coincidences of scarlatina with surgical diseases ; but, if they were so, we ought to find a proportionate number of cases among surgical patients not operated on. But this does not happen. In private practice, I do not remember to have seen scarlatina supervene in any surgical cases except those in which operations had been performed ; and, in hospital practice, I doubt whether it is much more frequent among all the other patients taken together than it is in those who have been operated on. I cannot, therefore, doubt that there is something in the consequences of surgical operations which makes

the patients peculiarly susceptible of the influence of the scarlatina poison. And, together with this susceptibility, we may observe that the disease undergoes in them certain modifications, especially in the period of incubation, which is much shortened. In all the ten cases that I have noted, the eruption appeared within a week after the operation ; and in eight of them, within three days after it ; namely, in two cases, on the first ; in three, on the second ; and in three, on the third day. Other deviations from the typical course of scarlatina were, that in some of the cases the eruption came out over the whole surface at once, and on the limbs more fully than on the face and chest : in some, there was no sore-throat ; in others, no desquamation.

The cases are not numerous enough to determine the import of these variable deviations from the type of scarlatina ; but that in which all of them, whether complete or incomplete in other characters, agreed, namely, the very early period after the operation at which the rash appeared, deserves particular notice. It adds to the evidence, that the appearance of scarlatina is in some way connected with the early consequences of operations. If it were not so, and if patients after operations had only the same liability as others, there would be no reason why the eruption should appear early, rather than late, after the operation ; but, so far as I have seen, it always appears early—always within the first week.

Two explanations may be offered of this fact. Either the condition induced in a patient by a surgical operation is one that gives a peculiar liability to the reception of an epidemic or contagious morbid poison, and any one of these, being imbibed immediately after the operation, produces its specific effect in much less than the usual period of incubation ; or else those who suffer with scarlatina within a few days after operations had previously imbibed the poison, but would not have manifested its effects so soon, if at all, unless their health had been exhausted or disturbed. The second of these explanations appears rather the more probable ; for it is in accordance with what has been observed when many persons have been exposed to the contagion of fever, and some have been afterwards exhausted by fatigue or otherwise. These have had fever ; while those who rested after exposure have escaped it.

But, whatever explanation may be given, the fact of peculiar liability to scarlatina after operations seems certain, and may be important in relation both to the pathology of the disease and to the risks of surgery. In one of the cases which I have seen, it was fatal ; in another, it was followed by fatal pyæmia ; and I think it not improbable that, in some cases, deaths occurring with obscure symptoms, within two or three days after operations, have been due to the scarlet fever poison hindered, in some way, from its usual progress.

# Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### TAUNTON AND SOMERSET HOSPITAL.

#### CASE OF SPONTANEOUS GANGRENE: RECOVERY.\*

Under the care of H. J. ALFORD, M.B.Lond.,  
Surgeon to the Hospital.

WILLIAM WINDSOR, aged 10 years, living at High Ham, in this county, was admitted into the hospital on November 27th, 1863. His occupation was that of a labourer. On admission, he gave the following history of his case.

His father was alive and healthy. His mother died three years ago, of what he called a tumour. He had one brother alive and healthy. Up to the winter of 1862, he had always enjoyed good health, although liable to suffer a good deal from the cold, when exposed in the fields "keeping" cows. His appetite was always good; he had meat daily, and baker's bread.† He had never taken any stimulants. He was always subject to chilblains.

Last winter, the helix and lobule of his left ear mortified. In time, the dead portions separated by ulceration, and the wounds so produced healed up. The right ear was subsequently similarly affected. Two black sloughs also formed on the left foot, one spot being below the external malleolus, and the other at the base of the fourth toe, over the head of the metatarsal bone. These sloughs separated, and the places healed. Then his eyes became affected during the spring of 1863; the left eye was particularly so. Judging from their appearance when he came into the hospital, he must have suffered from corneitis, if not also from iritis. The state of his eyes confined him to the house for a good portion of 1863; and he was to have proceeded to Bristol, to be under the care of Mr. Prichard, in order to have his eyes cured, had not a more urgent train of symptoms set in, for which he was at once sent to our hospital. Just one month before his admission, his left foot again became affected as before. A week after this, the index finger of his left hand became gangrenous; and then the other fingers and the thumb also became involved. A week before his admission, his right foot was similarly attacked; and, on the day of admission, the middle finger of his right hand showed signs of mortification.

On November 30th, I carefully examined him, and found his condition to be as follows. In general appearance, he was tolerably robust, of average size for his age, but of a somewhat scrofulous appearance. The hair and eyes were dark; the cheeks and lips pink. There was no anæmia. The lungs were healthy. A slight murmur was heard with the heart's systole over the aortic orifice. The tongue was clean and normal. His incisor teeth had a peculiar "pegged" appearance, indicative of a syphilitic taint. With regard to the eyes, I found inflammation with considerable opacity of the left cornea, and partial opacity of the right cornea. The edge of the helix and lobule of the right ear were sphacelated.

The edge of the whole pinna of the left ear was notched, showing the seat of former mischief; but was now healed. There was an enlarged gland below the left ear, of the size of a nut. With regard to his hands, I may first state that both radial and ulnar arteries appeared to be normal. The pulse was easily felt at the wrist, and was perfectly compressible, presenting, in fact, no deviation from the normal standard. The two phalanges of the thumb of the left hand, three of the index and middle, two of the ring, and three of the little finger, were dried up, black, and completely sphacelated. There was no distinct line of demarcation; but the black mortified portions seemed to tone down into the surrounding healthy structures. There was a large irregular gangrenous patch on the back of this left hand, of nearly the size of a crownpiece. The ungual phalanx of the middle finger of the right hand was also dead. On the left foot there was a black oval patch beneath the external malleolus, measuring one inch in length, by half an inch in breadth. At the root of the third and fourth toes, over the heads of the metatarsal bones, were two circular gangrenous patches. The pulsation was easily felt in the posterior tibials. On the right foot, there were two small patches over the insertion of the tendo Achillis, on the outer side of the heel posteriorly; and a very small black slough on the great toe at the root of the nail, and on the third toe inferiorly. There was no œdema. The superficial veins of the legs, thighs, and abdomen were somewhat slightly enlarged. The skin was cool. His appetite was good. His bowels acted regularly. He had no headache, slept well, and complained of no pain. When, however, a part was about to mortify, he said that he felt a coldness, tingling, and deadness in the portion about to be affected, which first turned of a bluish purple, and then black. There was no sign of inflammatory action in any of the parts affected.

Nov. 30th. A line of demarcation was becoming slightly apparent. He was ordered house-diet and some ale.

Dec. 1st. There was no further increase in the gangrene. He was ordered syrup of the iodide of iron, and cod-liver oil.

Dec. 4th. The line of demarcation on the right hand became more decided.

Dec. 5th. A slough separated from the helix of the left ear, leaving a healthy wound. Sloughs were separating from the left foot. Lines of demarcation in the fingers of both hands were becoming more marked.

Dec. 10th. A slough separated from the right foot, leaving a healthy surface underneath. A slough separated also on the back of the left hand. Dead portions of tissue seemed also to be separating from the proximal ends of the fingers of the left hand.

Dec. 24th. I found this morning the great toe of the right foot quite cold, and of a bluish purple colour. The rest of the foot was warm, and of natural colour. Cotton wool was kept constantly around the hands and feet.

Dec. 27th. On my visit this morning, I found the toe just mentioned restored to its natural condition. The sores on the right foot looked healthy, and were healing. The boy's general appearance was much improved. The opacity of each cornea was much diminished.

Jan. 4th, 1864. A small portion of dead skin separated from the little finger of the left hand, leaving a granulating surface underneath, which was dressed with solution of nitrate of silver. He got up and went into the convalescent room. The wounds on the foot were nearly healed. The blood, being examined under the microscope, showed no excess of

\* The following case was brought before the members of the West Somerset Branch of the Association, at their *concessione*, on January 20th, 1864.

† I have since heard August 1864; that he was treated and fed very badly.



white corpuscles. The red corpuscles appeared quite healthy.

Jan. 10th. Mr. Gibson, the house-surgeon, removed some portions of sloughs from the fingers with scissors; which sloughs consisted of cuticle and cutis vera. The remaining wounds appeared healthy.

Jan. 18th. The mortified portion of the forefingers was rapidly separating.

Jan. 28th. The second and third phalanges of the forefinger were removed at the joint, by cutting with scissors through the tendon. There was no hæmorrhage.

Jan. 29th. The last phalanx of the little finger was removed in a similar manner.

Jan. 30th. A portion of the last phalanx of the thumb was removed, and the tip of the ring finger of the right hand.

Feb. 1st. The wounds left by the removal of the dead parts were quite healthy, and disposed to heal. His appetite was good; pulse quiet; and he was soon afterwards discharged quite well.

### BIRMINGHAM GENERAL HOSPITAL.

#### HEMIPLEGIA, WITH LOSS OF SPEECH.

Cases under the care of JAMES RUSSELL, M.D.

[Concluded from page 213.]

**SUMMARY.** The result of an examination of the cases which I have presented in this paper will not, I think, prove unfavourable to Dr. Jackson's opinion; it will also present some rather remarkable contrasts between hemiplegia as it exists on one or the other side of the body.

I have narrated twenty-two cases of *right hemiplegia*. Of these, all but one (19) in which the data are incomplete, evidently depend upon organic disease. The number includes four cases of rapid death from the immediate effect of the disease, and two others in which death took place by a slower process. The paralysis was complete, or nearly so in fifteen cases; in four only was it incomplete or temporary; in three its amount was uncertain. Moreover, in nine cases (beyond the six fatal ones) the effects of the hemiplegic attack were still apparent at various periods, from three months to sixteen years. Once more in all the cases the hemiplegia was pure, the opposite side being quite unaffected.

Sixteen cases are reported of *left hemiplegia*. Of these, fourteen depended upon organic disease; two did not. Two cases of rapid death are included, and two of death by a slower process. Of the whole number, paralysis was complete in nine, incomplete in five, and in two others did not depend upon disease in the nervous centres. In three cases, the effects remained from three months to twenty years.

Of the fourteen cases of true organic hemiplegia, it is remarkable that there are seven in which, during the attack, some indication was manifested of affection of the opposite side, without including those in which, as in the preceding group, evidence of more general nervous disease had been afforded, before the attack which is the subject of present observation occurred; this implication of the right side has, of course, an important bearing upon the immediate subject of this paper.

With respect to the function of speech; taking first the twenty-two cases of right hemiplegia, it is stated to have been affected in every case but two. Of these two, in one (15) the paralysis occurred in early infancy; the effect remained in imperfect development of the right limbs, and of late in the occurrence of fits of epilepsy, during which speech was consider-

ably affected. In the other case (21), the paralysis was complete, or nearly so, but the faculty of speech was preserved.

Moreover, the affection of speech was of a most decided character in seventeen cases; speech was extinguished completely in fifteen; in three, the degree of impairment is not clearly indicated. Once more a very close relation was observed in fifteen cases between the extent to which speech was affected, and the amount of paralysis; in one (3), an exceptional case, the impairment of speech was out of all proportion to the paralysis; in the remaining four cases, the impairment of speech is not comparable with the paralysis from deficiency in the details.

If now we compare with the preceding cases, the sixteen cases of left hemiplegia, we find in two, absolutely no interference with speech, and in three others, probably none, as no reference whatever is made to articulation in the reports. In a sixth case, the paralysis took place in early infancy, but, though the paralysis remained after a lapse of twenty years, the patient talked perfectly.

Ten cases remain; in all, some impairment of speech is noted; from these, two may be at once eliminated, as not depending on a central cause; one, if not both, were hysterical. Of the eight cases which remain, in only two was the power of speech quite lost, and in one of these, speech was restored within twenty-four hours; in another case, impairment of the function of speech was considerable; in all the others it was slight.

In further analysing these eight cases of left hemiplegia depending on organic disease, in which speech was impaired or lost, it appears that in five, there was evidence of the *right* side of the body having been more or less implicated in the attack; in one of these (24), the cause of the affection of the right side was apparent after death, in disease of the cerebral arteries. In the sixth case (in which articulation was extinguished at the time of the paralytic attack), speech had remained imperfect from a preceding attack of *right* hemiplegia, occasioned by an apoplectic effusion; in the seventh (in which speech was slightly affected), a former attack of right hemiplegia had occurred from a like cause, though articulation is not alluded to in that connection; and in the eighth (in which articulation was much impaired), there was evidence of general decay of nervous power, tending towards general paralysis.

It is further to be remarked, that among the cases in which articulation was *slightly* impaired, is to be found one of extensive softening of the hemisphere, one of softening of the corpus striatum and thalamus, and one in which the paralysis remained twelve weeks afterwards, and was attended with atrophy of the paralysed muscles. Also that of the five cases in which no impairment of speech existed, or none is reported, there is one in which repeated attacks of complete paralysis of the arm took place, during six months; one in which two attacks of hemiplegia of the left side occurred during two months; another, in which paralysis remained eight months after, with atrophy of the muscles; and a fourth, in which paralysis continued at the end of seven weeks.

Speech is a compound function; articulation is not speech, and speech implies more than articulation. It comprises two elements, a mechanical and a mental.

The former element—the mechanical—requires the healthy action of the different muscles which move the glottis, the tongue, the palate, and the lips; it depends, therefore, upon the ordinary laws which govern all voluntary movements, viz.: a connection between the muscles and the centre of voluntary motion, through the medium of the nerves, and the in-

tegrity of that centre itself. The second element—the mental—implies the faculty of remembering the words which are appropriated to certain ideas, and of associating them with those ideas; consequently it necessitates an active condition of the intellectual centre, or as is more probable, of a particular part of that centre, and perfect communication between the intellectual centre and the centre of voluntary motion. As a particular function only of the intellect is involved in that element of speech now under consideration, this element may be impaired whilst apprehension is quick, and the intellect, to all external appearance, is undisturbed, as is found to have been the case in some of the preceding cases.

I recall a striking instance of speech being impaired through defect of the mental element, which occurred in the practice of my father. The patient, at the head of a large manufacturing establishment, had been very much absorbed for a considerable time in a very laborious undertaking of making an inventory of the goods, and his attack was attributed to excessive labour. To every question he made the same reply, "list complete"; and every desire was expressed by the same words. My father found him one day in extreme distress, from his inability to convey some information to his wife; his excitement grew extreme, and even threatened his life; till his wife asked if his life assurance premium were paid; he was relieved instantly; the premium was due on that day. I have not included this case among the preceding, as I cannot obtain sufficiently ample particulars; the widow certainly believes the paralysis to have been on the left side.

But in comparing several cases of loss of speech in cerebral disease, we may sometimes observe certain differences in the mode in which defect in the mental element manifests itself, and such differences seem to intimate that this element is composed of more than one subordinate part. In one case, as in the instance quoted, although the patient fails to recall the appropriate word, or expresses different ideas by the same word, he at once recognises the proper word when it is presented to him. Others, again, as in (5), appear to have entirely lost the faculty of associating any word with a particular idea, and are therefore unable to recognise the appropriate expression when repeated to them; whilst others, again, are unable to connect the sound with the combination of letters which that sound represents; such might have been the case in (2), for the patient never attempted to imitate any word she was directed to speak. An instance of a curious form of defect of speech from loss of memory is given by Van der Kolk (*On the Spinal Cord and Medulla Oblongata*, p. 165, note); in addition to loss of speech, the patient "was unable to read, even with large printed letters; and he was equally unable to write; the letters he placed upside down, or made illegible figures, although as an experienced merchant he had been able to read and write very well."

Defect of memory, as a cause of impaired speech, opens a wide field for deeply interesting investigation. Among other remarkable phenomena, is the occasional limitation of the defect in question to a particular class of words. Thus, instances have occurred of the loss of a particular language after recovery from the immediate effects of a blow on the head, which had caused insensibility. In a foot-note to a paper in the *Medical Times and Gazette*, Dr. Althaus, speaking of slight symptoms of poisoning produced in himself by woorara, adds, "Although the consciousness was not impaired, I had, for two minutes perhaps, lost the knowledge of the English language, in which I had just conversed with a friend of mine who happened to be present at the occasion;

and I was obliged to entreat him to speak German to me." He quotes mention of a similar circumstance from Sir H. Holland's *Chapters on Mental Physiology*, p. 160.

There is, however, a further condition necessary to be fulfilled, for the completeness of the mechanical element in speech, viz.: the arrangement and combination of the different muscular movements involved, so as to ensure their proportionate as well as harmonious contraction. This, the function of co-ordination, is required by the muscles of articulation as much as by those which perform the different movements of the body and limbs; in the latter case, as is well known, its performance has been assigned to particular portions of the encephalon, and especially to the cerebellum; but Van der Kolk has suggested that this co-ordination of muscular movement is more probably effected by particular combinations of the ganglionic cells in which the nerve tubules terminate; that certain of these ganglionic cells are formed into groups through the medium of the filaments emanating from their poles, and thereby particular muscles, or even portions of muscles, are combined into groups, which thus are "prearranged in the several combinations of the groups of ganglionic cells, and ready to be excited by any stimulus, whether voluntary or reflex, so that they are produced just as the harmonic tones of a piano under the fingers of the player."

In the case of the movements involved in articulation, however, the same author, with some apparent inconsistency, places the function in question in particular ganglia, the corpora olivaria of the medulla oblongata.

It is difficult, in many cases of impaired speech, to assign to the mechanical and the mental element the proper proportion of defect; such is especially the case when speech is quite suspended; the difficulty, however, relates in greater proportion to the mental than to the mechanical element. In many of the preceding cases, the fault plainly lies in articulation alone, speaking being freely attempted, but pronunciation being imperfect, or articulation indistinct. Yet even in some of these, an infusion of the mental element may be discovered; in Case 13, for instance, in which the fault lay mainly in articulation, the patient occasionally misplaced words. Some very characteristic instances of each kind of defect are found among the preceding cases of right hemiplegia.

In the cases rapidly fatal, defect of each element of speech is present in a large amount; consciousness is greatly dulled, and paralysis is considerable, the patient often being unable to protrude his tongue; 8 and 9 are instances, although, be it observed, in each there were sufficient intimations of intelligence to render it probable that the patients would have spoken had they possessed the power.

Of purely or chiefly mechanical defect, 1, 3, 11, 13, 17, are good examples; the patients endeavoured to talk, and failed merely through imperfect formation of their words. Of these cases, 3 is a remarkable instance, the more so as no paralysis of the tongue was apparent.

Patients 4, 5, afford illustrations of defect in the mental function involved in speech; the former, at first, articulated distinctly, but "was unable to find words, so that he came to a stand immediately after having begun a sentence;" there was, moreover, reason to distrust the correctness of the signs which he made. The latter affords a striking example of the independence of the mental element in speech; for by applying the test of writing, she was found as unable to express herself on paper as by the mouth. In neither case was there any deviation of the tongue.



Finally, in 2, 6, 7, the mental element was probably largely concerned in the defect, though to what extent it was intermixed with the mechanical element, could not be ascertained. The patients made few or no attempts to express themselves, though in the first two, at least, apprehension was perfect; in two, the tongue did not deviate; in one, it did. In 27, also, although the patient spoke freely in short sentences, yet his recollection was not equal to maintaining a lengthened train of ideas.

It thus appears that, in all cases of left hemiplegia, excepting the one just referred to, when the speech was affected, articulation alone was in fault; and that, in the one exceptional case, the disease appeared not to be confined to the left hemisphere of the brain. So far, therefore, as these cases go, they support Dr. Jackson's opinion, which has reference solely to the mental element in speech; to "want of brain-power, either to form ideas or to find words." Whilst, in fourteen cases of left hemiplegia, every instance of impaired speech, with one *apparent* exception, depended on defect of articulation alone, the twenty-two cases of right hemiplegia afford three instances of very decided defect in the mental element, and three others in which the same defect existed to a minor degree.

## Transactions of Branches.

### MIDLAND BRANCH.

#### CASE OF BONY DENTIGEROUS CYST OF THE LOWER JAW: EXCISION AND DISARTICULATION.

By S. W. FEARN, F.R.C.S.E., Surgeon to the Derbyshire General Infirmary.

[Read at Nottingham, June 23rd.]

I HAVE lately had under my care, in our County Hospital, a case of disease of the lower jaw, of so rare and interesting a character, that I think a short account of it may prove acceptable to the members of our Branch Association; and I feel the more induced to present it to your notice from the fact that, in most of the works on surgery which I have consulted, there is no mention of the disease, and because also I was myself deceived as to its true pathological significance before its removal.

The following notes are extracted from my hospital case-book.

Mary Smith, aged 13, was admitted into the Derby Infirmary, February 29th, 1864. There was a large resistant tumour of the left side of the lower jaw, extending from the ramus to the symphysis; and there was considerable enlargement also of the right side of the jaw, as far back as the ramus. The tumour had been growing about six months; and there was a constant very fetid discharge from its surface. Several teeth had been extracted; but the second permanent molar and one of the milk-molars remained on the side most affected. There was much irregularity in the growth of the teeth on the right side. I was unable to detect any opening into the tumour, on examination with a probe. The breath was exceedingly fetid, though her general health was very good. I ordered her a lotion containing permanganate of potash and glycerine, to be used frequently.

March 15th. The disease being considered one of the enchondromatous growths commonly called osteo-

sarcoma, I to-day removed it in the following manner. After extracting the left central incisor, an incision three or four inches long was made along the base of the jaw to the chin; and the soft parts separated from the bone without dividing the lip, so as to allow the passage of a fine metacarpal saw between the lip and the jaw. The mouth had been previously gagged with a contrivance made for the purpose by Mr. Morley, dentist. The bone was partially sawn through at the symphysis, and the division completed with strong cutting forceps. The incision was then extended along the base to the angle of the jaw, and thence as high up as the condyle. The facial artery bled freely, and was at once secured, as were also several other vessels. The soft parts covering the exterior of the bone were carefully dissected away, and the flap raised so as thoroughly to lay open the cavity of the mouth. On the division of the jaw, a considerable quantity of fetid pus escaped. The separation of the soft parts from the bone within the mouth required much care, as did also the detachment of the soft parts from the ramus and coronoid process. The disarticulation was pretty easily effected, and no vessel of any importance was wounded. Five ligatures were required; and the flaps were brought together with wire sutures at short intervals.

The diseased mass was found to be essentially a large osseous cyst of considerable thickness and density, separating the outer and inner plates of the jaw. The cavity was lined with a thickened, pulpy, very vascular membrane; and the canine tooth was seen growing from its floor. The cyst extended from the ramus of the left side beyond the symphysis for an inch and a half into the body of the jaw on the right side. A portion of the bony cavity on the right side I removed with the bone-forceps; and, in doing this, the muscles attaching the tongue to the inside of the jaw were necessarily divided. This was followed by a retraction of the tongue, which had to be secured to one of the wire sutures by a double thread.

The patient was seated in a chair, in which she was secured with roller-towels during the operation; and, on its completion, she became so collapsed that we were fearful she would have sunk. She was immediately placed on the table, and restorative means employed before the dressing could be proceeded with. The chloroform was very efficiently and carefully administered by my friend Dr. Goode.

S.P.M. She was pretty comfortable; had no pain in the face or wound; but complained of headache, and of the ligature in the tongue, which I loosened, so as to allow of more play in swallowing. She had had tea and wine and water several times. There was very little fever. The headache was probably occasioned by the chloroform. Pulse 120. Should she be restless, she was ordered to have a third of a grain of morphia.

March 16th. She has had a good night, with frequent sleeps of half an hour's duration. She took tea and beef-tea; was rather thirsty. Pulse 120. The morphia was not given.

Vespere. She was flushed and rather feverish. Pulse 116. The thread through the tongue was removed; and she afterwards swallowed a little milk. The bowels were not open. She was ordered to have an injection.

March 17th. She was much better. The bowels were freely open this morning. There was no heat nor flushing. Pulse 108. There was a good deal of ropy secretion from the mouth.

Vespere. The cheek was swollen and red. She was rather feverish; pulse 106. She was directed to repeat the injection, and to apply cold-water cloths to the cheek. She had slept much during the day.

March 18th. She had a good night. The bowels were open twice. There was no fever; less flush. Pulse 100. The wound seemed to be uniting by the first intention.

March 19th. Nearly all the sutures were removed. Union seemed perfect. In all respects, she was going on well.

March 21st. The remainder of the sutures were removed, and three of the ligatures. She was very well.

March 23rd. The remaining ligatures came away yesterday. There was some suppuration and salivary discharge from the parotid gland. There was perfect control over the right half of the jaw; and there was now no difficulty in swallowing, and hardly any soreness in the mouth.

March 25th. The mouth was comfortable; the wound was healing very satisfactorily. She was ordered to use the following lotion to the mouth frequently.

R Soda bichloratis ʒiiss; tinctura myrrha ʒiii; glycerinae ʒss; aqua ad Oss. M.

March 28th. She was allowed to get up.

March 30th. Three or four points in the line of the cicatrix, from which there was a salivary discharge, were touched with caustic. The face on the left side was entirely paralysed.

April 9th. There was still a little salivary discharge from two or three points. The whole side of the face was swollen and puffy, and the lower eyelid was rather oedematous. The mouth was quite healed.

April 23rd. She was discharged cured.

REMARKS. I have said, at the commencement of my paper, that but little is to be gathered from surgical writings on the subject of these cysts. A mere allusion is made to them in *Druitt's Manual*; and in *Paget's Lectures on Surgical Pathology*, at page 410, after speaking of ovarian and other cysts containing teeth, he says: "Other dentigerous cysts occur within the jaws. In some cases, cysts are hollowed out in the substance of the upper or lower jaw, and are lined with a distinct membrane, to some part of which a tooth is attached. I believe these are examples of tooth-capsules from which the teeth, though perfectly formed, at least in their crowns, are not extruded, and which therefore remain, becoming filled with fluid, and growing larger." In a footnote, Mr. Paget mentions two examples of the disease which are in the museum of St. Bartholomew's Hospital; and a third, which he saw cured by Mr. Wormald, by cutting away part of the cyst, and removing the tooth. Mr. Paget also alludes to the subject in an article on Innocent Tumours, in *Holmes's System of Surgery*; as does also Mr. Holmes, in an essay on Diseases of Bones, in the same work.

I believe the case before us (a preparation of the diseased growth in which, and photographs of the patient, taken four or five weeks after the operation, I have the pleasure to exhibit) is an instance of the kind described by Mr. Paget; and that the thickened pulpy membrane lining the bony cyst is merely the canine tooth-capsule, distended in the first instance with its own proper fluid, and afterwards assuming dropsical proportions. The crown of the tooth seems perfectly developed; but there is no appearance of fang, and there is no indication of the existence of the permanent bicuspid. The fluid contents of the cyst had long been putrid and puriform; and I think, looking to the solid character of its bony wall, and the great size it has attained, it is very improbable that a mere perforation and evacuation of it would have led to a cure of the disease. It is more likely that an exhausting drain would have gone on for some indefinite period, seriously damaging the patient's health, and resulting in necrosis.

The cyst was found, on measurement, capable of holding an ounce and a half of fluid.

I was struck, in the after-treatment of the case, by the little trouble occasioned by the remaining half of the jaw. There was scarcely any tendency to depart from its proper position; and this I attributed to the division of the genio-hyoid, the genio-hyo-glossi, and the digastric muscles, at their attachment to the tubercle inside the symphysis. There seemed to be a perfect balance in their antagonism between the pterygoid muscles and the masseter; though later on, when the tongue-muscles and the digastrici had, at their points of division, contracted adhesions to the neighbouring structures, they again asserted their power, and produced some drawing in of the jaw. There is, however, much less deformity than might have been expected after such an operation; and I feel no doubt that, after a further lapse of time, the poor girl will have a very presentable appearance.

The power to protrude the tongue was only partially recovered at the time of the patient's discharge from the hospital. She could then only make its tip touch the lower lip.

It has struck me that much of the trouble experienced, in cases of fracture of the lower jaw, in keeping the broken portions in apposition, is occasioned by the contraction of the tongue-muscles and the digastrici. As long as the jaw remains entire, it is a fixed point for these muscles to act upon; but when the bone is broken through, the resistance being lost, it is drawn inwards by the action of the muscles, which have now lost their natural antagonism. In the absence of a proper mechanical contrivance, might not much of the difficulty, in some of the embarrassing cases we meet with, be got over by a subcutaneous division under the chin, or within the mouth of the attachment of the muscles inside the symphysis?

I may mention, in reference to osseous cysts of the jaws which are not of the dentigerous kind, that the best account I have found of them is contained in Dupuytren's work on the *Diseases and Injuries of Bones*, translated by Mr. Le Gros Clark, and published by the old Sydenham Society. Nine cases are there related of bony cysts of the upper and lower jaws, some containing fluid, and others fibrous growths; but none of them appear to have been of the character exhibited in the specimen before you, though Dupuytren remarks, that "teeth are sometimes found in cysts inclosed in bone", and mentions a case in which M. Loir showed him an osseous cyst developed in the palatine process of the superior maxillary bone, the immediate cause of which, he says, was clearly the reversed position of a tooth. This case was, I suspect, an instance of distended tooth-capsule, though it does not appear to have been so looked upon by Dupuytren. I think it probable, too, that one or two of his other cases had the same pathological meaning, though he seems himself not to have been aware of their true character.

## BATH AND BRISTOL BRANCH.

### PRESIDENT'S ADDRESS.

By R. WILBRAHAM FALCONER, M.D., Bath.

[Delivered July 15th, 1864.]

GENTLEMEN,—In 1862, the members of the British Medical Association held their annual meeting in London; and when we remember the great interest which attached to that meeting, the importance of its proceedings, and the generous hospitality extended to the members on that occasion, by public bodies, as well as by private individuals, the retiring president (Dr. Francis Ker Fox, of Brislington) of our Branch might



well be excused for speaking somewhat distrustfully, at the conclusion of his address last year, as to the degree of success which might attend the then approaching meeting of our parent Association in Bristol.

Those, however, who were present at that meeting, will remember, it is believed, with unmingled pleasure, how worthy a successor it proved to the metropolitan meeting; how, to make use of the words of its distinguished president (Dr. Symonds, of Clifton), when describing the objects of the Association, "Not only the mutual improvement and instruction of its members, and the promotion of good will, but also the advancement of the character, and the elevation of the aims of the profession," were fully and satisfactorily sustained by its proceedings. This happy result was produced, I need hardly say, by the praiseworthy exertions of those who occupied the most prominent positions in the transactions of the meeting, combined with the unwearied, and by common consent, successful efforts of the Bristol Council, of which body it may justly be said, in the words of the Roman poet,

*"Certe tulit punctum, prius in seculo dulcis."*

We are now looking forward, not without eagerness, to the coming annual meeting of the Association at Cambridge. In that ancient seat of learning we may trace memorials of those, who, in the earlier days of our national history, emancipated our country from spiritual bondage, translated into our native tongue the records of our faith, and spread abroad the light of Christian truth. There, too, we may linger amid scenes, where the genius of Bacon, of Newton, and of Ray was fostered, as well as of many of those whose names time would fail me to tell—who, both in earlier, and in more recent days have adorned the ranks of our profession, and shed lustre over its records. Well are such scenes calculated to impress our minds, and stir up deep thoughts within us, leading us away from the greed, the selfishness, and sensuality of the world, to the pursuit of those higher and more dignified aims, the realisation of which will confer lasting benefit on mankind, and brace us for a more energetic prosecution of those arduous inquiries, by which the mighty weight of human suffering is sought to be ameliorated.

Turning, however, aside from these thoughts, we are naturally disposed to-day to glance at the position which our Branch Association holds, as compared with that occupied by it at the same period last year.

The Annual Report states that twenty-three new members have been elected during the year that has elapsed; a number which much more than replaces the losses sustained by resignation or other causes, and raises the numerical strength of our Branch to one hundred and seventy-three. The increased number of our meetings has not led to any deficiency in the number of communications submitted to them, but, on the contrary, many of great interest have been left unread, with which a new session may well be commenced, and the attendance of members has fully equalled, if it has not exceeded, that of any previous year. Thus, we are enabled to refer with satisfaction to the past, and to augur favourably as regards the future.

Since our last annual meeting, one member of our Branch has died, at an advanced age. Mr. James Crang, of Timsbury, was, until a recent period, a regular attendant at our meetings; for a long time he was a member of the Bath Council, and in 1858-59, President of our Branch. Anxious as I am to do justice to the memory of this gentleman, I have failed in obtaining, even from the most likely sources, little more information than, that he entered on his professional duties previous to the year 1815, and for

many years enjoyed, in the neighbourhood of his residence, a large and successful practice, from which he had for some time retired, previous to his decease. The only professional appointment he appears to have held, was that of Surgeon to the North Gloucestershire Militia.

The city in which we meet, and the hospital (the Bath General, or Mineral Water Hospital) within the walls of which we are now assembled, have led me to think that a brief notice of the mineral waters, for which the former has been for centuries celebrated, and the medicinal administration of which, is the special object of the latter, may not prove uninteresting on the present occasion.

The difficulty which attends the classification of mineral waters is exemplified by the different characters which, from time to time, have been assigned to the thermal springs of this city. Thus, according to their effects, to their predominant constituents, or to the association of certain ingredients in them, they have been classified as hot carbonate chalybeate; chalybeate; saline; calcareous; or earthy, waters.

From the analyses which have been made of them, their contents are found to consist of carbonates of lime, soda, magnesia, and carbonate of the oxide of iron; of sulphates of lime, potassa, and soda; of chlorides of sodium and magnesium; and a small quantity of alumina, and silicic acid. To these ingredients, however, during the last two years, lithium and strontium, the metallic bases of the alkalies, lithia and strontia, have been added. These additions have been made by Professor Roscoe, of Manchester, by means of the *spectroscope*. The complete results of the analysis thus made will be communicated to the British Association at its next meeting, to be held in this city.

The gases of these waters consist of nitrogen, of which 240 cubic inches are evolved from about 126 gallons of water yielded by the King's Bath Spring; of free carbonic acid, of which nearly 26½ cubic inches are found in a gallon of water, at a temperature of 115°F., and a small quantity of oxygen.

There are four springs of waters, "Perennial Springs, whose water is neither increased by the greatest glut of rain, nor lessened by the greatest drought." Their temperature varies according to the spring, from 108°F. to 120°F. Their taste is that of a saline chalybeate water. They are employed medicinally either in the form of baths, douches, or enemata, or by drinking.

Their physiological effects are, a sensation of fullness of the head, flushing of the face, giddiness, quickening of the pulse, a sense of weight and fullness of the stomach, and nausea, succeeded by headache, and a more or less prolonged condition of febrile excitement, and in some cases by constipation. The last mentioned effect has been overrated, for when taken daily, in moderate doses, these waters more frequently tend to induce a regular action of the bowels, especially if taken early in the morning, and in large doses sometimes cause purgation.

The indications which point to their beneficial influence on the system are, a grateful sense of warmth in the stomach, a moderate increase in the frequency of the pulse, a greater secretion from the kidneys, and an augmentation of the flow of the saliva.

When employed externally, they elevate the temperature of the body, quicken the pulse, increase for a while the perspiration, and produce a general sense of alertness and vigour. If the bath be employed either at too high a temperature, or for too long a time, the physiological effects above mentioned, will soon manifest themselves.

Fuller and more accurate inquiries are necessary,

as to the action of these waters upon the specific gravity and composition of the urine, on the temperature and weight of the body, previous, and subsequent to their employment.

The therapeutic action of these waters in cases of *subacute* and *chronic rheumatism* is undoubted. In such instances, pain and stiffness are relieved while the patient is in the bath, or being douched, and this relief continues at first for an hour or more afterwards, which period is increased after each subsequent bathing and douching, until recovery is completed. The symptom which lingers for the longest time is stiffness, but this, by repeated bathing or douching, will eventually be removed. In cases of muscular rheumatism, as lumbago, relief is quickly obtained, except in protracted and very severe instances, yet even in these, much immediate comfort is afforded by the use of these waters. In arthritic rheumatism, in cases most especially where the age does not much exceed fifty years, the benefit derived from the waters is well marked; but where the joints are enlarged by old rheumatic deposits, the feet and hands distorted, while the general relief afforded is great, the alteration for the better in the size of the enlargements, and the direction of the distortions, is but small. In young persons, however, the commencement of the articular enlargements is arrested, distortion prevented, and an improvement in the general health obtained. The age of the patient, hereditary diathesis, the duration of the complaint, and the constitutional powers, are all important facts to be taken into consideration, when calculating the probable amount of benefit which may be obtained from the use of the special remedy under consideration. The employment of the waters soon after an attack of acute rheumatism, when convalescence is completed, or where it is more than usually protracted, or where recovery has been incomplete, is productive of great comfort, removes the remains of the disease, and prevents it from assuming a chronic character. In cases also, of rheumatism, attributable to a syphilitic source, relief from pain is soon brought about by the use of these waters, though its continuance is variable.

During the last seven years, there have been admitted into this hospital 2409 cases of rheumatism; 810 of which recovered, 1470 were much better, and 129 not at all relieved. To these may be added, 252 cases of sciatica and lumbago, of which 104 recovered, 128 were greatly relieved, and 20 received no benefit at all. Of 61 cases of all kinds of rheumatism, which came directly under my own observation, during the year 1859-60, consisting of 43 men, and 18 women; 18 of the former recovered, 22 were greatly benefited, while 3 received no relief whatever; of the latter, 5 recovered, and 13 greatly benefited. The average duration of the treatment of the males was about sixty days, and of females, somewhat more than eighty days.

In *sciatica*, the general or local application of the waters, or, what is better, the two combined, almost invariably gives relief, and frequently, even in severe and chronic cases, effect recovery. Of 25 cases of sciatica, consisting of 21 men, and 4 women; 11 men recovered, and 10 received marked relief; while 2 women recovered, 1 was much better, and 1 no better. These patients had previously suffered from sciatica, for periods varying from five weeks to "several years." The average duration of the treatment of the men was a little more than fifty-one days, and of the women, sixty-five days.

It not unfrequently happens that in many cases of rheumatism, including sciatica, and also of gout, that the employment of the waters is accompanied by only moderate relief; but, after their use has been relin-

quished, the affection subsides without subsequent recourse to remedial measures. So frequently does this occur as to render it a marked feature in the effect of these waters.

The beneficial effects of the Bath waters in *gout* are those, perhaps, for which they have been longest and most generally known. In former days, those suffering from the suppressed or irregular form of this disease were commonly sent here to the mineral waters, with the intention of inducing a paroxysm of gout by their use. This custom, so prevalent about sixty years ago, is thus humorously alluded to by Herberden in his *Commentaries*:—"Ludovicus XIV, Gallie rex, cum fortè fistulâ ani laboraret, non pauci ex subditis ejus sibi persuaserunt se eodem vitio fuisse correptos, et non leve negotium facerentur chirurgis, qui tum vivebant, ficto suo morbo petentes auxilium. Quod si in Galliâ fuisset aqua medicata quæ fistulam potuisset inferre, illuc puto haud minus cupidè properatum esset, quam Bathoniâ nostri petunt, ut reportent podagram." (*Com. de Med. Hist.*, p. 31.) The practice of thus employing the waters is even yet not unusual; but a more complete acquaintance with the pathological conditions of the disease, has rendered the use of the waters, with this object, much less frequent than in earlier times. In acute gout, the employment of these waters is clearly inadmissible, on account of their stimulating properties. When, however, the acute symptoms have subsided, their use accelerates convalescence, and refreshes the system generally. The earlier they are used, after such an attack, the greater is the amount of benefit obtained. In chronic gout, which has not proceeded so far as to produce tophaceous deposits around the joints, to any very marked degree, and, where the dyspeptic symptoms are not extremely urgent, and where the recurrence of acute attacks are frequent, the waters will, when used in the intervals, not unfrequently induce a paroxysm, but when this has been subdued, recourse may be again had to the waters, and, by their prolonged use, the attacks of the disease may be warded off for a considerable period. In cases where there are tophaceous deposits around the joints, it has been thought that their diminution has been effected by means of these waters. The decrease, however, is more apparent than real. The inflammation caused by the presence of chalk stones, induces thickening and ulceration of the contiguous skin. These conditions are, to a great extent, relieved by the waters, so that the enlargement of the joints is in reality diminished in size, but there is no diminution in the amount of the deposit. The effect of these waters does, I am disposed to believe, contribute to check the tendency to the deposit of fresh material, and retard the progress of nascent chalk stones. When, in consequence of repeated attacks of this disease, the functions of the digestive organs have been much impaired, the benefit derived from the waters is soon observed by the decrease of heart burn, and the feeling of distension of the epigastrium, with an improved condition of the tongue, an increase of bile, and a more copious secretion of urine.

As regards *chronic skin diseases*, it has been correctly remarked, that the external use of these waters has been "renowned in all times." Both their local and general effects are such as would lead to the expectation that they would be advantageous in such cases, independent of the circumstance, that many kinds of this class of diseases appear to have a close relationship to that diathesis of the constitution, which is productive of gout and rheumatism. It has been found that numerous cases of skin diseases admitted into this hospital, have succeeded attacks of rheumatism, or have been accompanied with symptoms of subacute or chronic rheumatism; and the termination of an



attack of rheumatism is not unfrequently succeeded by erythematous and eczematous affections of the skin. Many persons, also, who suffer from gout, are subject to skin affections, which subside during an acute attack of that disease, and there are others who, even with an hereditary claim to gout and gravel, suffer from the latter, but exchange the former for intermittent or irregular attacks of eczema and psoriasis. It is in virtue of this relationship to rheumatism and gout, that many cases of skin disease are recovered by means of the Bath waters, and many of a like kind would also recover, under ordinary treatment, if this circumstance were borne in mind.

Lepra, eczema, and psoriasis are the form of cutaneous disease, of which the greater number of cases resorting to this hospital offer examples, and these generally of a chronic, and, I had almost said, an inveterate kind.

Of 454 cases of skin disease, which have been treated in the Water Hospital during the last seven years, 256 have recovered, 193 were much better, and 5 no better; making a total of those who received marked relief, of 449 out of 454 cases.

In *paralytic affections* generally, it is customary to forbid the use of the waters, until several, usually six months, have elapsed after the seizure. This custom has been in many instances too rigidly observed. With proper caution, this remedy may be employed with advantage, as soon as well marked indications of restored nervous power appear, especially in cases accompanied by great general debility, with far more prospect of ulterior benefit, than when delayed for a longer time. A general review of the register of this hospital tends to shew that the recoveries from paraplegia have amounted to 10 per cent., or, taking the recoveries with those relieved, the percentage amounts to between 30 and 40 per cent.; while the recoveries in cases of hemiplegia have been five per cent., or, the recoveries, with the cases which have been relieved, amount to 30 per cent. During the last seven years, 328 cases of paralysis have been discharged from the hospital, of which 25 recovered, 229 were greatly relieved, and 74 no better.

There is a form of paralysis, namely that which arises from lead-poisoning, presenting itself commonly under the form of "*dropped hands*," and occasionally of "*dropped feet*," also, in which the use of the waters is generally attended with remarkable advantage. Of this class, 139 cases were admitted into the hospital during the last seven years; of which number 75 recovered, 63 were much better, and 1 was no better. Of 39 cases, which came directly under my own observation, 24 recovered, 13 were greatly benefited, and 2 relieved. The average duration of treatment was somewhat less than ten weeks.

It has been remarked that those who have suffered from lead-poisoning, are frequently liable to paroxysms of gout, as a secondary affection. It is seldom, however, that those who have recovered from the poisonous effects of lead by means of the waters, suffer afterwards from gout. The same beneficial effects attend the treatment of paralysis arising from other metals, as arsenic for example. A remarkable instance of recovery from poisoning by the latter occurred in this hospital a few years since, in the case of a man who had taken a large quantity of "*rat-poison*" in the form of powder, which contained at least 90 per cent. of arsenic. The immediate effect was excessive vomiting, followed soon after by complete paralysis of both the upper and lower extremities.

The affections to which attention has now been drawn, are among the principal in which these waters are employed; but there are also others, which it will be sufficient for the present purpose only to name, as *anæmia*, *amenorrhœa*, *dysmenorrhœa*, and the more

common forms of *dyspepsia*. In *chorea*, their beneficial effects have been frequently noticed and recorded. Of this affection, 28 cases were admitted into the hospital, between the years 1857 and 1864, of which number 26 recovered, and 2 were greatly relieved. Those cases of chorea receive the greatest amount of relief which are associated with, or attributable to, rheumatism, to *anæmia*, or *amenorrhœa*, while those, the origin of which may be ascribed to mental causes, do not appear to receive an equal amount of benefit. In any estimate which may be made of the therapeutic powers of the Bath waters, due attention should be paid to the fact, that a great majority of the cases in which they are used are of long standing, have already undergone almost every variety of treatment, and have taxed the ingenuity, and tried the patience of many an intelligent practitioner, before a trial of these waters is suggested, to which the patient ultimately resorts as a last hope. Now, if of one hundred such cases some thirty or forty per cent. recover, which is the case, by means of the Bath waters, this fact alone may be regarded as evidence sufficient to establish their curative powers.

But, it may be asked, to what special properties of these waters are their beneficial effects to be attributed? This is a question not easily answered in the present state of our knowledge of this class of remedies. Something is in the first place due to their temperature, which, for all practical purposes, regarded simply as thermal waters, they are as efficacious as any such springs can be. The higher temperature of other waters is useless, inasmuch as water begins to scald in proportion as its temperature approaches that of the hot bath spring, the heat of which is 128° Fahr. But that there is any peculiarity in their heat, that it is "*volcanic*," or "*telluric*," and therefore the waters are endued with peculiar properties, as some writers have asserted, which make it to differ from ordinary water at an equal degree of temperature, cannot for a moment be allowed. Caloric, wherever found, or however produced, is the same. Still, the effect of these waters is distinguishable from that of common water of the same temperature. The general effects of the latter are relaxing, of the former invigorating; the warmth imparted to the body by the one is transient, that conveyed by the other is, comparatively speaking, permanent. As these effects cannot be wholly attributed to their temperature, the explanation of the differences must be sought in the mineral ingredients which enter into their composition.

As regards their effects in rheumatism and gout, it is probable that the sulphate of lime and lithia, exercise some special influence over such cases, inasmuch as all mineral springs which contain these ingredients are efficacious in calculous, gouty, and rheumatic disorders. The carbonates of soda, lime, and magnesia, by their ready union with acids, combine to soothe the irritable condition of the digestive organs, and promote the formation and elimination of the biliary secretion, as well as remove those depraved conditions of the stomach which attend on gout and rheumatism. To these results, the chlorides of sodium and magnesium in all probability contribute.

Small as is the proportion of iron in these waters, it is presented in the best possible form for producing its special effects. So remarkable are these effects, that it has been frequently suspected, that much of this ingredient has eluded detection by the reagents of the analyst, and led to the belief that some portion must have escaped in a volatile form. This supposition, though since repeated, was disproved more than a century ago, and recent observations have confirmed this conclusion. The stimulating effects of carbonic acid are well known, while the influence of nitrogen—

to the presence of which in some springs their good effects are said to belong—is not as yet explained.

Any attempts, however, which may be made to explain the physiological or therapeutic action of these, or other mineral waters, by reference to their particular ingredients, can, in their conclusions, be regarded as only approaching to what is true. It has been very justly observed that, "the physician ought to take into consideration the fact that any table of analysis only presents to him an approximative view of the true composition"—of mineral waters. "The chemist, when he presents such an analysis, does not offer even the actual results of his own investigations. He writes down the names of a number of compounds, as if they were things which he discovered in the liquid; he says, so much carbonate of soda, so much carbonate of lime, so much sulphate of soda, phosphate of soda, chloride of sodium, sulphate of lime, etc. But this is all hypothetical. What he actually found by means of his reagents, were such and such acids, and such and such bases; and then, according to the supposed energies of their mutual affinities, he mentally combines them into the salts displayed on the face of the analysis. It is plain therefore, that the physician cannot judge of the effect of any given compound said to enter into such a mixture, from experience drawn from its employment *by itself*, or under different circumstances." (Aldridge, *German Spas*, p. 185, *et seq.*)

The small amount of mineral ingredients contained in the Bath waters, has been alleged as a sufficient indication of their inefficacy, *whatever experience may have taught to the contrary*. But here a question presents itself, what is the effect of dilution in facilitating the operations of such, or indeed of all therapeutic agents? There are numerous mineral springs which have maintained, like those of Bath, during a prolonged period, a high reputation in the treatment of disease, which upon analysis are shewn to contain so small an amount of mineral ingredients, that it is difficult to explain their efficacy if our attention is confined to those constituents. At the same time, it is reasonable to suppose that a much smaller quantity of a mineral will be required to produce a given effect, when it is exhibited in a very dilute condition, and under circumstances by which its complete absorption into the circulation is secured. The chemist has ascertained what a very minute proportion of iron enters into the formation of red blood; and the physiologist has shown what a very small quantity of this metal is absorbed even when large quantities are given as an ordinary medicine. If, then, the mere fractional parts contained in some mineral waters be taken under such circumstances that the whole is utilised by the system, it will be quite equal to a very much larger dose, the greater part of which escapes in an inert form.

Notwithstanding what has been said, there are still remaining questions relating to the operation of these and all other mineral waters, which have as yet received only a partial solution. I refer to their effects, on the excretions, on the circulation and the respiration, as well as on the temperature and weight of the body before and subsequent to their employment. Until such inquiries carefully made have been satisfactorily completed, we must be content to be guided by evidence of concurrent testimony as to their beneficial effects. To refuse the attention due to the latter on account of the deficiency of information on the former point is as unreasonable as it would be to deny the existence of a moral sentiment because we are unable to explain the principles upon which mankind adjudge the preference of characters, and upon which they indulge such vehement emotions of admiration or contempt.

If such knowledge on this subject, and it may be added on many others also, within the domain of medicine, come but tardily or not at all in our time, we may rest contented with the anticipation expressed in the words of Seneca: "*Veniet tempus, quo ista quæ nunc latent, in lucem dies extrahat, et longioris ævi diligentia; ad inquisitionem tantorum atus una non sufficit. Veniet tempus, quo posteri nostri tam aperta nos necesse mirentur.*" (Seneca, *Naturales Quæstiones*, lib. vii., cap. xxv.)

It now only remains, gentlemen, that I should thank you, with great sincerity, for your kind attention, and for the honour you have conferred upon me, in selecting me as your president for the ensuing year. I trust that you will extend to me the same generous and cordial assistance which you have ever accorded to my predecessors, and that my own endeavours, thus sustained, may contribute to the welfare and prosperity of our Branch Association.

## British Medical Journal.

SATURDAY, AUGUST 27TH, 1864.

### THE MEDICAL PROVIDENT FUND.

WE adverted recently to the formation of a Medical Provident Fund, as a new and integral part of the British Medical Association. If we are to judge from the enthusiasm with which this measure was received at Cambridge, and from the unanimity with which it was passed by one of the largest meetings of our body, and if we are further to judge from the anxiety which is expressed respecting it by members within and without the Association, we may fairly assume that the Provident Fund is destined to become one of our most important departments, and one of the most powerful agents that has of late been advanced for improving the condition and standing of the profession at large.

We need not dwell at any length on the necessity that exists for this bond of strength and mutual support. The necessity is admitted on all hands, and even by those who are not altogether friendly to the work of the Association. There is not, in fact, a city, town, nor scarcely a village, in the kingdom, which does not cry out for the union. In every locality, some of our brethren are to be found, on whom, in mid career, and long before plenty has made them independent of the world, sickness has laid its grasp, and arrested the active and benevolent Æsculapian hand in the fulness of its power. Then has come a time when, after a long struggle to meet the foe, effort has destroyed itself in the very attempt to hold on; and the man who is moving amongst his fellow-men, attempting to relieve their sorrows, has succumbed at last, to find no means of existence except the assistance of friends or of those societies which, necessarily limited in their action, have risen among us for the purposes of benevolence. The Pro-



vident Fund steps in, then, to meet the men circumstanced as we have depicted them. It invites them, not to ask a favour, but to claim a right. It says to them, "In days when work can be done, pay into a common fund a small sum which is within your reach: balance the chances of your own ill health individually against the health of the body at large; and secure straightway such an income that for two years, at all events, you may live, and gain time to recover from the ill fate that has befallen you." We say there can be no doubt as to the soundness of this principle; and we add nothing further on that score.

It remains, therefore, for us only to ask whether the British Medical Association affords the means by which the mutual aid, so much demanded, can be promptly and effectually secured. We have no hesitation in giving a decidedly affirmative answer on this point. The Association, as it is constructed, is, to use a common phrase, a ready-made instrument for the attainment of the object specified. In its ranks are men of all classes. There are men who have borne the toil and heat of the day, who have won their rewards, who are ready to help others, and are prepared to call back on themselves that loving-kindness which always returns freshly and bountifully on those who have the courage and the will to send it forth. There are others, who have so far won their way, that they do not see the absolute necessity of joining such a fund for their own sakes, but who yet think it may be wise so far to set the wheel of fortune at naught as to make precaution doubly sure, and who feel that, any way, their expended money cannot be lost. Lastly, there are men who are conscious that this fund will be to them a safe investment, and that, backed by it, they may go on their way rejoicing; feeling that, come what will, they have something to fall back upon, and that, even if they be removed from the possibility of performing their labours, the wolf is kept from their door.

We may rest assured, from the indications already manifested, that all these classes of members in the Association may be relied on. It was natural, that the promoters of the Fund should turn first to their wealthier friends, and ask from them such guarantee of their good will as should give to the undertaking a satisfactory and firm basis. Nor are the expectations unrealised. Already, with scarcely any appeal, the Chairman of the Provident Fund is able to announce through our columns a guarantee of £200; and we doubt not that, in a few weeks, his return will be infinitely more interesting. Already, large numbers of the members have undertaken to join the Fund as ordinary subscribers; while numerous inquiries have been made, tending to the same object. Thus, as regards what may be considered the feeling of the Association, all is sound.

But, again, the organisation of our body is in

every respect favourable for the full development of the project. The Association possesses eighteen Branches in different parts of the kingdom; the majority of which are so strong, that each could singly carry out a local fund capable of meeting the necessities of the district in which it is situated, and each of which admits of extension to any degree. Of course, such local associations would labour under disadvantages; disadvantages, however, not unsurmountable. But, if Branches acting independently, and labouring under many difficulties, such as pertain to all local provident societies, can work, how much more readily can they succeed when the whole of them act in unison, and when the days of sickness pertaining to each are distributed over the whole! Nothing, in fact, could be more fortunate for a provident effort, than the existence of these numerous and active centres. They are so many local associations *de facto*; and as, in regard to what may be called the federal unity, they are in perfect harmony, and as, by the constitution of the Association, they are on perfect equality, they constitute a basis on which, in our opinion, an useful project could not more safely rest.

The establishment of the Fund, on the plan suggested by the Committee appointed at Bristol, is a further promise of the success that awaits the measure. Nothing could be fairer—nothing more catholic in sentiment. Each Branch is to elect its own representatives in the Directorate; and it will naturally elect those men on whom it relies with most respect and confidence. The Committee of Council—the executive of the Association—is to make the election on behalf of members not belonging to branches; but its powers of election are properly limited, so that its representatives can exercise no overwhelming influence on the management; while the Association, as a body, nominates the Chairman, who may be considered as uniting together the whole organisation. We do not think the most critical of our readers will complain of a policy so liberal, fair, and comprehensive.

There are numerous matters of detail connected with the Fund, some of which were very ably discussed at Cambridge, and upon which we might dwell. We prefer not to follow this course, but to leave those details to the consideration and decision of the body of Directors, when they shall have assembled. That body will be locally and generally trusted by the Association; and we doubt not that it will be equally trusted by the profession at large. It will be open to every medical man to offer to the directors such suggestions as he may think likely to be of service; and we may be sure that every important suggestion will receive due consideration.

It remains for us only to urge upon our fellow-associates to give to the Fund their earnest support. Every member, whether a director or not, can do

something towards this great undertaking. If the members generally become subscribers, they will establish a fund for mutual relief, such as at the present time belongs to no profession and no calling; and they will shew to the world, that those who bear so many burdens of the community with calmness and equanimity, can share their own in a manner worthy of imitation by the highest and the lowliest of the land.

### ITERUM CRISPINUS.

WHEN we last week explained the manner in which the *Lancet* had obtained possession of Dr. Humphry's Address, and had published the same, we made use of the expressions of Dr. Humphry himself.

The "agent or reporter for the *Lancet*" (we quote from Dr. Humphry's own account of the transaction) called on and asked Dr. Humphry for his Address for the *Lancet* on Wednesday. Dr. Humphry gave the man the MS.; but told him that he must call again in the evening before he used it. In the evening (after due inquiry), Dr. Humphry told the man "that it must not appear in the *Lancet* of this week, because it would not be in the JOURNAL"; and he felt quite assured that it would not do so. We stated, in our comments, what was the simple fact, as given to us by Dr. Humphry.

But the *Lancet* is, also, very indignant with us for stating that it attempted to obtain illicit possession of addresses and papers at the London and the Bristol meetings of the British Medical Association. It says the charge is a *falsehood*; or, to give its own words, it accuses us of

"Reiteration of falsehoods, which it" (the BRITISH MEDICAL JOURNAL) "has never attempted to prove, and which we have repeatedly and flatly contradicted. No application was made to any one at the London meeting for his MS.; far less for sole possession of it. Certain gentlemen who were asked by us for abstracts—notably Dr. Walshe—offered their MSS. spontaneously."

Now, the mere "flat contradiction" of a statement does not disprove its truth; and in this case the *Lancet's* contradiction is proved by itself to be untrue. It knew, as well as we do, that it had no business with Dr. Walshe's Address; yet it goes to the author begging for an abstract, and then gets an offer of the MS. Why, this is just the very charge of attempt at illicit possession which we made against the *Lancet*.

To ask gentlemen for abstracts of their papers; to take advantage of the ignorance of those gentlemen as to the rules of the Association, and then quietly to pocket and publish the papers—this is what the *democet* does; and then has the impudence to add, it is a *falsehood* to say that application was made to any kind of person at the London meeting for their papers.   
imitation

In further answer to this charge of falsehood, we will add, if further reply be needed, that both at the London and Bristol meetings, we received numerous letters from gentlemen who had promised papers to the Association meetings, stating that they had been applied to by the *Lancet* for them, and asking what they were to do. Oh! says the *Lancet*, we only asked them for an "abstract"; but, of course, if any of them choose to offer us their MSS., all the better. "Reiteration of falsehoods it has never attempted to prove," indeed!

Perhaps, the *Lancet* will (as it asks for a specific charge) tell the profession how it came possessed of the first half of Dr. Handfield Jones's paper, read at the London meeting, which it published, and of which it never published the second part—the *to be continued* part?

The *Lancet* is quite wrong in supposing that we have any hysterical affection for its attentions, or any dread of its enmity. We wish to show into what hands the profession would fall, if it had no other literary representative than the *Lancet*. We wish to point out the commercial character which it has exhibited in connection with the British Medical Association. At the London meeting, it gives a full account of the transactions of the Association—and simply to show that it (the *Lancet*) was the Press of the medical profession. At Bristol, again, because its London attempt to injure us failed, it tries the other tack, and actually ignores the existence of the whole meeting. This model representative of the profession devotes ten lines to an account of the splendid meeting, and the first rate addresses which were read at that meeting. And now at Cambridge it prints the Address of Dr. Humphry, obtained as stated above.

Is this the conduct of a model representative of the medical press, or is it not rather the demonstration of a spirit of rivalry worthy of Moses and Co.?

THE Commander-in-Chief and the Director-General have completely beaten the doctors. Seventy-seven candidates have passed their examination for the army; and what will still more delight the authorities above-named, is the fact that not one of them, we believe, has found his way into the first class. The *Army and Navy Gazette* crows over "the doctors" in the following terms.

"There are over three hundred vacancies, and the supply amounts to seventy-seven! Notwithstanding the disfavour with which the Army Medical Department is regarded by the influential medical men, and in spite of the apparent resolve to stick to their military brethren come to by the civilian physicians and surgeons, a number of candidates sufficient to fill existing vacancies passed the examination which has just concluded. It appears that eighty-eight candidates presented themselves, of whom seventy-seven passed the ordeal satisfactorily. So far as we can



learn, one of the principal reasons for the backwardness of young surgeons in seeking employment in the army is an exaggerated estimate which they had formed of the severity of the examination; and several of those who have now passed had their anticipations pleasantly dissipated, when they found that the ordeal is really one which no competent man need fear. The seventy-seven who were successful will now enter on their probation, and be available for the service in February next; and they will be amply sufficient to provide for the probable vacancies for some time! That there is no dearth of physicians and surgeons seeking for employment may be gathered from the fact that there were over three hundred applications for the appointment of acting assistant-surgeons."

Our friends, the waiters on Horse Guards' providence—the acting assistants—will be in a still worse case than they have hitherto been. Only twenty-four of them have, as yet, we hear, been gazetted. However, something to their perspective advantage has lately turned up. They are not expected to wear her Majesty's uniform. This is a bonus; they will not have to fit themselves out in regimental costume. It is useless speculating on the causes of this rush of candidates for army honours. Some say the young gentlemen were in hopes of great things from the deputations medical to the army authorities; some say, they hoped to get through easily on account of the army being short of medical officers. The great fact is, that these are landed fit for service—at least, in the eye of the Medical Director. All that we can do in face of the fact is, to offer our congratulations to the Horse Guards on their success; and to the Director-General in particular for the victory which he has gained over the opinion of his medical brethren.

THE best friend of the medical profession in the general press is *Punch*—the most true and orthodox of them all in matters medical. An excellent hit he has just given us. "About the Netley Monument: a chat between a Swell and a Surgeon in a Railway Carriage." The Swell agrees that the doctors are shamefully treated, and offers a suggestion or two. The Swell calls rescinding the warrant "an awful swindle." Of the advertising for acting assistants, the Swell says:

"Certainly, the cleverest way to get the compound of surgeon and snob which they appear to want. Only I'm afraid it doesn't answer. Have an ideal! As they are resolved that medical officers in the army shall be snobs, they should head their advertisements, 'Wanted, Snobs for Surgeons.'"

NOTWITHSTANDING all that has been said to the contrary, there is, we believe, no doubt that army medical officers have the power of arrest, like all other commissioned officers. An army surgeon assures us that he has confined soldiers and non-commissioned officers, and has no doubt that he has the right to put under arrest officers junior to himself. It was only the other day, in India, that a native apothecary put a sergeant under arrest. His right

to do so was contested, but was upheld by the Judge Advocate General. Statements on matters military, made even by the Commander-in-Chief, must not be altogether accepted as positive. The Duke of Cambridge, for instance, told the medical deputation that the commanding officer of a regiment presides over boards in his regiment; but it turns out, as we learn, that he never does so; he merely orders them to assemble. As regards the *branding* business, which Dr. Wood assured the meeting at Cambridge was satisfactorily disposed of, we have not yet heard that any order has been issued; and, of course, until such general order is issued, modifying the position of the surgeon in reference to that disreputable operation, we shall conclude that the old order is still in force. We have been asked what the present order is; and therefore give a *verbatim* copy of it, issued by order of the Adjutant-General.

"His Royal Highness the General Commanding-in-chief, with the Secretary of State for War, is pleased to direct that soldiers sentenced to be discharged with ignominy, and marked with the letters B. C., shall be so marked by the hospital sergeant of the regiment or dépôt to which the offender belongs, under the directions of a medical officer; the marking to be effected prior to the man's committal to a civil prison, and to be carried out after the present mode of marking with the letter."

WE were much surprised to read, in Dr. Gibson's address to the Prince of Wales on the occasion of laying the first stone of the memorial to medical officers who perished in the Crimea, that it was stated generally by Dr. Gibson they died from disease brought on by overwork, and that not a word was stated as to any of these sixty-two gentlemen having been *killed*. We are now informed that the very first officer *killed* in the trenches was a medical officer. It is much to be regretted that this statement, and all other instances of a similar kind, were not more specifically alluded to on the occasion, and especially at the present time, when every effort is being made to keep the medical officer in the position of a "non-combatant". Certainly, as the statement made by the Director-General went before the public, it would lead all the world to think that the whole of these gentlemen perished from disease; that none of them were killed by the enemy. We shall be very glad to supply the deficiency, if any gentleman can give us the facts; and to tell the profession how many of our medical brethren died in the Crimea from actual wounds.

M. PERRIN, who has lately experimented on himself to test the action of alcohol, has ascertained that by its use the quantity of carbonic acid exhaled from the body is diminished. It appears to exercise but little influence on the constitution of the urine.

M. Kœberlé of Strasburg relates twelve cases of ovariectomy, nine of which were successful.

M. Davaine some time ago pointed out the presence of *bacteria* in the blood in cases of malignant pustule. In the blood of typhoid fever, similar animals were afterwards found. Then came MM. Tigli and Signol, who generalised on the influence of these animals. Now come MM. Leglat and Jaillard, who tell us that these vibrios have nothing to do with the disease. When introduced into the blood by themselves, they do not cause the diseases referred to. It is the diseased fluid which is injected with them which produces disease.

M. Brillat-Savarin had in May and June under his charge about fifty cases of severe colica pictorum. He discovered at last that lead was contained in the bread eaten by his patients. On further inquiry, it was found that the miller, in order to regulate the movement of his mill-wheels, had filled up the cavities in them with melted lead.

The French papers announce the death of Madame Orfila, the widow of the famous Dean of the Paris Faculty of Medicine.

Tarbes has resolved to raise a statue to Larrey, who was born at Baudéau in the Pyrenees.

M. Claude Bernard tells the Academy that the inoculation of *penicillium glaucum* and *albium* *Tuckerii* on a healthy man is followed with no inconvenience.

## THE INDIAN MEDICAL WARRANT.

THERE appears to be but one opinion in India as to the character of the new Indian Medical Warrant.

The *Hibernian* of June 25th says: "Considering its clauses, there is very little in this hunting of six years' incubation. It does a little good to cause a little harm to others, and leaves a large number exactly where they were before. The condition of the assistant-surgeons is improved by a willing addition to their pay, but the surgeons in charge of British regiments are damaged, their allowance for medical charge of their corps and their local money being taken away. . . . We do not think this Warrant will serve to make the Indian service more popular than it has been during the last six years. If Sir C. Wood had given any temptation, in the way of increased pension, to retire, the whole medical service would have crumbled in a heap, and we expect that now the generosity of Sir C. Wood is known, the senior medical officers will retire in large numbers. They have now seen the thing out; they have not been favoured as others have been, and they will leave the Warrant men and the Horse Guards to try if they can reconstitute such a medical service as once existed in India, and is now shrinking to decay."

The *Delhi Gazette* writes: "Facts are stubborn things, and we cannot disguise from ourselves the truth that the more we examine the Warrant, the more it appears to us to have been framed with a view to the degradation of that service which it professes to support and uphold. Sir John Lawrence himself has marked his disapproval of the scheme in some of its minor details by giving addenda to the new Medical Warrant immediately on its promulgation. During his protracted career in India he had,

no doubt, many opportunities of learning the value and sterling worth of the army medical service in this country. The scheme is in detail the most illiberal and unfair that could have been prepared. Sir Charles Wood has clearly been 'robbing Peter to pay Paul,' and has by every means in his power debared Her Majesty's medical officers, with the exception of those assistant-surgeons who might, by good fortune, obtain the temporary charge of British regiments or brigades, from receiving extra emolument. The Secretary of State for India has increased the regular pay of assistant-surgeons from the clippings of staff allowances formerly granted to surgeons and assistant-surgeons while in separate charges; and if the truth were known, he has solved his difficulties by the two simple rules of subtraction and addition. The new medical scheme is nothing more nor less than a bait to tempt young men to enter the medical branch of the army. Sir Charles Wood's promise, that a final decision connected with the future provision of the medical officers in India will be communicated hereafter, must be valued at the same rate as all his other promises; and we would urge upon young graduates who may be tempted to enter the medical department of the army to pause before they take the fatal step. They will do well to remember that every one looks forward to enjoying in his old age rest and competency, but should they expect that this will be their fate, judging from affairs as they at present stand, they will without doubt be sorely disappointed."

The *Times of India*, after showing in figures the complete farce which has been played upon the service, adds: "The change which was required, and which the service had every right to expect, was, that its members should draw pay in the same way as officers of all other branches of the service. If such a principle of payment is bad, why adopt it with reference to such an overwhelming majority of officers? Why make such an invidious distinction as to exclude the medical branch, and it alone, from what is only considered a right by the rest of the army? Are the medical officers' duties less onerous, less responsible, or less satisfactorily performed than those of the other officers forming the regimental or other staff? Is he worse educated, or drawn (if properly treated) from a lower rank in life? Does he not share the dangers and privations of war equally with all combatant officers?—and does he not undergo far more anxiety, responsibility, and fatigue, in times of pestilence? Why, then, should he be put upon a lower level in any one item? Of one thing the Government may be very certain, viz., that until the Medical Department of the army is put upon a proper footing as regards their relative position with the other departments, few, if any, well-educated gentlemen will be found to seek admission to it. Experience has already too well proved of how slight security is Her Majesty's sign manual held in the hands of an all but irresponsible minister; and we strongly urge upon the professors and other members of the medical profession in England, to recommend all their students who may wish to become candidates for employment in the army, whether of England or India, not to do so until not only shall all their rights in regard to position and pay be ceded to them, but until they are placed beyond the arbitrary diction of the Horse Guards, or the caprice of a minister, by being guaranteed by a special act of Parliament. Medical men, though almost altogether unrepresented in the House of Commons, have it, nevertheless, in their power to enforce this; and until they do so, there will be no security to those who are beguiled by the fair promises held out to them when the nation is in trouble, and their aid cannot well be dispensed with."



## Association Intelligence.

### COMMITTEE OF COUNCIL: NOTICE OF MEETING.

The Committee of Council will meet at the Queen's Hotel, Birmingham, on THURSDAY, the 1st of September, at One o'clock precisely.

*Business.*—To consider the subject of International Correspondence between the Society for the Promotion of Medical Science in the Netherlands and the British Medical Association.

To consider the amount of increase in the Salary of the General Secretary.

To appoint the Readers of the Addresses in 1865.

To consider the propriety of applying for a Royal Charter for the British Medical Association.

To elect the Representatives of the Council on the Directorate of the Provident Fund.

To agree to instructions to be issued to the different Branches as to the Election of their respective Representatives in the Directorate.

Any other business which may be brought forward.

T. WATEIN WILLIAMS, *General Secretary.*

13, Newhall Street, Birmingham, August 23rd, 1864.

### THE ANNUAL MEETING.

The following name was accidentally omitted from the list of members present at the Annual Meeting in Cambridge.

DAVID THOMAS, M.D., Chester

### THE MEDICAL PROVIDENT FUND.

DR. RICHARDSON begs to announce the following contributions to the Guarantee Fund—

|                                      | £.  | s. | d. |
|--------------------------------------|-----|----|----|
| Amount already subscribed .....      | 115 | 10 | 0  |
| Dr. Burrows, F.R.S., London .....    | 21  | 0  | 0  |
| T. Spencer Wells, Esq., London ..... | 5   | 5  | 0  |
| C. J. F. Lord, Esq., Hampstead ..... | 10  | 10 | 0  |
| Dr. Markham (London) .....           | 10  | 10 | 0  |
| Dr. Barker (Bedford) .....           | 5   | 5  | 0  |
| H. D. Garden, Esq., Worcester .....  | 31  | 10 | 0  |

Further contributions will be announced.

It is expected that the first meeting of Directors will be held early in October.

12, Hulse Street, Manchester Square, W.

## Reports of Societies.

### OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JULY 6TH, 1864.

H. OLDHAM, M.D., President, in the Chair.

Two gentlemen were elected Fellows of the Society.

*Specimens.* Mr. HARPER exhibited an Ovarian (?) Tumour removed by Mr. Baker Brown. The nature of the tumour being a matter of doubt, the specimen was referred to Dr. Greenhalgh and Dr. Braxton Hicks, in conjunction with Mr. Harper, for special examination.

Dr. SNOW BECK exhibited an Uterus removed from the body of a woman who died on the ninth day after a natural labour, and who presented all the symptoms of a severe form of puerperal fever. The peritonium was found inflamed after death, and about two pints of turbid fluid existed in the cavity of the abdomen. After a minute and careful examination of the organ,

the sinuses, the pelvic veins, the lymphatics, as well as every other tissue, were found perfectly healthy, and the internal cavity everywhere covered by a soft membrane, containing the usual microscopic elements of the mucous membrane. A decided negative was thus given to many of the supposed causes of puerperal fever. But it was shown that the sinuses and pelvic veins permitted air to flow along their cavities, and that a ready means thus existed for the purulent infection of the general system. This open state of the sinuses was further traced to an imperfect contraction of the uterus after the birth of the child, which thus allowed fluid to pass along these canals.

Dr. MURRAY showed a specimen of Fibrous Tumour of the Uterus. It was interesting from the fact of its growing entirely in the posterior wall of the cervix uteri, without involving in the least degree the body or fundus of that organ. The internal os could be distinctly felt, and sharply separated the sound from the diseased tissue. The patient was in too weak a state to admit of any operation, or that of enucleation might possibly have removed the mass, which was larger than an orange.

Dr. MARION SIMS, who was present, in reply to a question, stated that he had practised in certain cases incision of the os uteri for the purpose of restraining the hæmorrhage often present in cases of fibroid tumour of the uterus. His results had been satisfactory; but he had not practised it sufficiently often to be in a position to speak decisively as to its absolute value. He disclaimed originality as to the operation itself.

Dr. GREENHALGH exhibited a Pelvimeter made by Mr. Ferguson during the year 1859, which so closely resembled the instrument lately described as a "New Pelvimeter," the invention of Drs. Earle and Murphy, that he felt it due to his colleague, Dr. Harris, to state that this instrument was devised by and manufactured for him nearly five years ago.

### ON PLACENTA PRÆVIA.

BY ROBERT GREENHALGH, M.D.

The author first alluded to the large mortality both to mothers and children (one in four and a quarter of the former, and about two-thirds of the latter), which he attributed mainly to the severe and repeated losses of blood, to the delay in effecting the delivery, and the method of turning usually had recourse to in these cases. He then gave the details of twenty-four cases which had occurred in his own private and consulting practice between the years 1842 and 1864. He placed before the Society several statistical tables, chiefly taken from Dr. Read's work, to show, in addition to other facts, that the expulsion of the child generally takes place before the full period of utero-gestation—premature labour being the rule and not the exception; that nature, unaided, frequently terminates the delivery with safety both to mother and child; that complete and partial artificial separation of the placenta before the birth of the child has failed in numerous cases to arrest the hæmorrhage; and that these methods and turning had proved most unsatisfactory in their results. Having dwelt at some length upon these several points, he strongly advocated a close observance of the way in which nature terminates these cases with safety to mother and child. Having specified the result of his observations on that head, he confidently recommended the following plan of treatment, which had proved, as far as the limited number of cases could prove, in his hands and in those of others, far more successful both to mothers and children than any other method hitherto devised. It was as follows:—1st. That in any case of hæmorrhage, whether profuse or otherwise, occurring after the commencement of the seventh month

of utero-gestation, ascertained to be due to placenta prævia, artificial premature labour should be induced at once, or as soon as the condition of the patient will admit of it. 2ndly. That in order to effect that end without loss of blood, an air-ball, covered with spongio-piline, be passed, collapsed, into the vagina, and then inflated so as effectually to fill that canal, while a bandage is placed firmly round the abdomen; at the same time the ergot of rye and borax are to be administered in repeated doses. He further recommended as aids, stimulating enemata, with tincture of nux vomica, galvanism, and friction over the abdomen. The author concluded by condemning, in the strongest terms, the use of general hygienic means and hæmostatic remedies over days and weeks in these cases, which course, he was firmly convinced, was the cause of many valuable lives being lost.

Dr. BARNES observed that, agreeing generally in the principle that labour should be brought on in cases of severe hæmorrhage from placenta prævia—a principle, he believed, commonly acted upon in London—he could not assent to much of Dr. Greenhalgh's reasoning, or consent in approving his plug. His statistical reasoning was open to criticism. He assumed two postulates: first, that the mortality of placenta prævia was 1 in 4½; secondly, that the mortality from inducing premature labour was 1 in 53; and he drew the extraordinary conclusion that by always inducing labour we might substitute the low mortality of premature labour induced under selected circumstances for the assumed heavy mortality of 1 in 4½. Now both the postulates were false, and the conclusion was manifestly illogical. The mortality of 1 in 4½ drawn from Dr. Read's tables was a most unfair representation of the results of modern obstetrics. He (Dr. Barnes) had analysed his own cases. Since the publication of his Lettsomian Lectures 59 cases had come under his own observation; and he drew 24 from other sources, most of these last being treated upon his (Dr. Barnes's) principles. The deaths were six only, or 1 in 14. And if he were to follow Dr. Greenhalgh in striking out the fatal cases on the ground that treatment was too late, he might show statistical results very far superior. He should have, not 10 successful cases, but 77. Two of his cases died of pyæmia, having been treated by forced delivery—that is, in direct opposition to his principles; 2 were moribund when seen, and 2 were hopelessly anæmic. He had taken all cases as they occurred in his books without selection or arrangement, yet 26 cases fell as an uninterrupted series of recoveries, which he might fairly place against Dr. Greenhalgh's selected 10. Then as to the mortality in premature labour. Premature labour was induced under selected circumstances to avoid dangerous complications. Such cases were not to be compared with labours forced upon us by the flooding of placenta prævia. This Dr. Greenhalgh disregarded. But surely placenta prævia went for something. Then the children. Dr. Greenhalgh had been fortunate. In his small series of 10 cases, he had 8 living children. He (Dr. Barnes) ventured to say that a larger experience would modify this result. Many dangers surrounded the child in placenta prævia: cross births, funis presentations, immaturity, and asphyxia *in utero*; some were born putrid. His (Dr. Barnes's) plan was eminently adapted to secure the child. But his mortality was '63. The very method of Dr. Greenhalgh of bringing on premature labour must of itself often destroy the child, for the floodings would come on at six and seven months. And in some cases flooding did not occur until the end of gestation. These were often the most dangerous. Yet here Dr. Greenhalgh's plan was not available. And what was Dr. Greenhalgh's plan? The use of a vaginal plug, not differing essentially from the col-

peurynter of Braunn. It acted like all other vaginal plugs, by exciting uterine contraction, if the uterus was excitable. But unfortunately in the worst cases the uterus was paralysed. In these, where art was most necessary, the plug was useless. He was surprised to hear Dr. Greenhalgh undervalue rupturing the membranes. This simple method was in many cases quite sufficient, and no method was long serviceable without it. If in combination with rupturing the membranes, the placenta was detached from the cervical zone, so freeing the cervix, the cervix then artificially expanded by his cervical dilators, and the bimanual method of turning resorted to, he was confident, from large experience, that a greater measure of success would be obtained than by any other especial method. He took that opportunity of stating that the first published case of the use of the intra-uterine dilator in placenta prævia which attracted his attention, belonged to Mr. Jardine Murray, of Brighton.

Dr. HALL DAVIS had little faith in statistics of placenta prævia representing a mortality of one in three or four from that complication, knowing that former statistics to that effect had included cases originally published, not to show the average mortality, but as selected instances for the most part hopeless when first brought under medical observation, and intended to prove the fatal tendency of this complication of pregnancy if not timely seen to. He would also observe that we are not left without authority, laid down in lectures and works of reputation, to convince us of the dangers of delay in placenta prævia, and guide us to efficient treatment. He might refer, for example, to the lectures of the late Dr. D. D. Davis at University College from 1828 to 1841, and to his esteemed System of Obstetric Medicine, which taught no temporising treatment, but, on the contrary, the necessity of early and active interference, while at the same time pointing out the hazards of a forced delivery through a rigid os uteri. As to his own experience, he might state that in the Royal Maternity Charity alone he had had, from 1842 to 1862, as physician of the western district, twenty-four cases of placenta prævia. In that number twenty-two mothers were saved, and the two deaths would have been averted had the injunctions given been observed. His treatment had varied with the case. Thus in *partial* placenta prævia he had found the simple discharge of the waters usually sufficient. When the flooding has not been thus arrested, and delivery has been impracticable by reason of the small size of the uterine orifice, he has plugged the vagina impacted with sponge, or with a sufficient quantity of other suitable material at hand. He has then waited in security for the first opportunity of acting if necessary. In many cases, on withdrawing the plug the head was found descending, and the birth was quickly completed without further aid. In cases of *entire* placenta prævia, when the os uteri would not admit of delivery, he also resorted to the plug, of similar materials as before, believing such a plug, from its solidity, when efficiently applied, to be far superior to any elastic dilator. After from two to six hours he was generally enabled to remove the plug and deliver by turning. In this operation he preferred to pass his fingers in by the side of the placenta, where it might already be detached, to perforating its centre, as some have recommended, as this latter mode necessitates a more considerable injury of the placental vessels and further hæmorrhage. In the operation of turning, it had been his usual practice to fix the uterus by the right hand applied externally on the abdomen while turning with his left hand. To Dr. Hicks, however, (*Obstet. Trans.*, vol. v) were we indebted for a definitely combined mode of *external* and



*internal version* by acting on the opposite poles of the child, the breech above being depressed by the external hand, while at the same time the presenting head is pressed upwards and to its own side. Then the feet are lowered to the os uteri and one or both brought through; the risk, so especially great in flooding, of passing the hand into the cavity of the uterus being in this way avoided. In conclusion, he might say that, while he differed from the author on the points to which he had referred, he fully concurred with him, as all judicious practitioners must do, that to delay efficient interference in this complication is most hazardous.

Dr. J. BRAXTON HICKS quite agreed with Dr. Greenhalgh as to the necessity of inducing labour in placenta prævia as soon as arrangements could be made, which he believed to be the plan adopted by all who saw much midwifery in this city; it was the practice he had always adopted. With regard to the statistics quoted from Dr. Reade's work, he quite agreed with Dr. Barnes as to their want of value. All large groups of statistics were utterly useless as a guide of any particular practice. It was absolutely essential that the details of the cases should be known. In the tables presented to the Society it was impossible to say what were the surroundings of the patients; whether, in fact, they had died from the operation, from the hæmorrhage, or from the subsequent calamities to which it was known cases of placenta prævia were exposed. How, therefore, could we tell the value of any particular plan of treatment without this information? He considered that when it was said the death-rate was 1 in 4½, there must be some mistake as regards present practice. In the Guy's Hospital Charity it was for nine years at 1 in 7½. He also was obliged to differ from the assertion that the life of the child was not influenced by placenta prævia. That it was so he had no doubt; for in half of the cases he had seen where it was made out clearly, the child was known to be dead before any operation was attempted. He hoped the author would have alluded to the plan which he (Dr. Hicks) had recommended in his recent paper on "Combined Version," because he felt sure that it was a very useful one, and not difficult to anyone who would take the trouble to learn it. He had known at least nineteen cases, many of them very severe, in which it had been used, with only one death, and that arising from extreme hæmorrhage before seen, and which could not be put down to version. In all his cases there had been immediate cessation of bleeding as soon as the breech was in the os, and he had found that almost in every case labour pains expelled the child within two or three hours from the commencement of the operation. This point it was important to know in order that we might make our arrangements accordingly. The child was a most efficient plug, and it could be brought down as soon as the os would admit a finger or two. With regard to the small size of the os preventing turning in the above-mentioned mode, he could say it must occur but seldom; when it did so, the detachment of placenta round by one finger generally liberated it considerably, enough at least to introduce two fingers; if not, the elastic bags could be used with much advantage. We must judge of treatment by its practical application; our hands we have always with us, whereas if called to a case at a distance from home, or in great hurry, it would be impossible sometimes to obtain the plug now shown. The effect of version upon the life of the child he could not compute. Doubtless cephalic was the best presentation; but he had not found in his cases any great mortality. The important point was not to hurry the case after the breech was in the os. The child was generally destroyed by drawing it down before the os uteri was

open sufficiently. When the breech was in the os, the case in almost every instance might be left to nature, adopting the rule as in breech cases.

Dr. GRAYLY HEWITT considered the principle enunciated in the paper now read, of the necessity of interference in cases of placenta prævia, to be one of great value. This principle had never been sufficiently insisted on, and although admitted by men of experience, it had not been laid down as a principle in the obstetric text-books. He might mention that two years ago a gentleman in practice in Yorkshire had, in conversation with him, alluded to this very subject, having lost a patient from a suddenly recurring hæmorrhage, due to placenta prævia. The gentleman in question had hesitated, on the occurrence of the first hæmorrhage, to induce premature labour, not finding such practice sanctioned by the text-books, and the patient, living at some distance, had perished when the hæmorrhage recurred two or three weeks later, before assistance could reach her. Doubtless there were cases of this kind occurring from time to time, and which would have been saved by interference. He considered, therefore, that the expression of the opinion of the Society on this subject would have a most beneficial influence, and that patients known to have placenta prævia would not be left liable to perish at any moment from hæmorrhage. With reference to the particular plan of treatment advocated by Dr. Greenhalgh, which was a modification of the "plugging" system, he had some remarks to make. It was to be recollected that in cases of placenta prævia we have two lives to consider—that of the mother and that of the child. What is best for the one is not always the best—nay, it is frequently the worst—for the child. The safety of the child lay in speedy delivery; the safety of the mother in preventing hæmorrhage. Plugging the vagina, artificial or partial separation of the placenta, were measures calculated to stop hæmorrhage; but such treatment, unless accompanied with speedy delivery, was prejudicial to the child, whose vitality was necessarily destroyed by separation of the placenta, to any considerable extent, with or without concurrent external loss of blood. On referring to Dr. Greenhalgh's statistics, it would be seen that although the mortality to the mother was, on his system of treatment, low, yet that the percentage of still-births was high, and the plan in question was, therefore, open to this serious objection. He (Dr. Hewitt) was quite aware that it was impossible to legislate equally well for all cases, the circumstances of each case being, to a great extent, peculiar; but any generally accepted system of treatment must have in view the preservation of the lives of both mother and child. Rapid natural delivery best fulfilled all the indications, and this should be the object sought to be attained in the treatment of these dangerous cases. In a certain number of instances rapid natural delivery was not possible, and under these circumstances the operation of turning offered the best alternative. The extraction of the child should not be performed too soon after the version, unless the bleeding still continued; for until the os was tolerably dilated, the neck of the child was likely to be so tightly caught by the os as to prevent extraction. When the fetal heart was beating very slowly, rapid extraction of course afforded the only chance of preserving its life. In conclusion, he considered the Society under obligation to Dr. Greenhalgh for his very practical and able paper.

Dr. BEATTY (of Dublin), in reply to an invitation from the President to address the Society on the subject, said that he addressed the Society under very serious difficulty; for, not having had the advantage of hearing the paper now under discussion read at the former meeting, he did not well understand its

bearings; but, as well as he could collect from the speakers who had preceded him, he inferred that there were two points particularly dwelt upon by the author. The first was the time at which we should interfere in cases of placenta prævia; and the second, the kind of assistance most proper to be given. It appeared to him (Dr. Beatty) that the author of the paper recommends delivery as soon as possible after the case was fully made out. In this respect, there was not much difference between his and the practice very usual in Dublin. We wish to finish the case as soon as possible; but it must be recollected that in many cases speedy delivery was impossible, for occurring as the hæmorrhage most usually does for the first time in the eighth month, or even earlier, when the os uteri was little disposed to relax, it not unfrequently happened that the os uteri was so rigid that delivery could not be attempted. We must then temporise, and, by means of position, plug, cold, etc., endeavour to gain time, and save the patient from loss of blood as much as possible. He had spoken now of cases in which there was complete covering of the os uteri by the placenta; but in cases of partial covering, where we could feel any portion of the transparent membranes, the practice was to rupture them at once, and discharge the liquor amnii. When this could be accomplished, we feel pretty easy about the case. The head of the child comes down, and, by pressure on the placenta, prevents any further loss of blood. If the uterus was not disposed to act vigorously, its action was quickened by the ergot of rye. He always depended upon the infusion of the powder made on the spot. It was a medicine that required great care for its safe preservation. He never went out without a drachm of the powder in his pocket-case. It was put up in metallic paper, so as to prevent the absorption of the oil by ordinary paper. It should not be kept more than two months in the case. If not used before then it should be replaced by another drachm. When used it was infused in four ounces of boiling water, and half of it, powder and all, given at once, and the other half in a quarter of an hour. When treated in this way the medicine had never failed him. If the case was one of complete covering of the os uteri, we watch the earliest moment at which the os uteri was dilatable, and then proceed to deliver the patient by turning the child. From these few hurried observations, it appeared that the practice in Dublin does not much differ from that laid down by the speakers who had preceded him (Dr. Beatty) in this debate.

Dr. WOODMAN mentioned some cases in which he had observed the good effects of the treatment recommended by Dr. Barnes.

Dr. GERVIS remarked that the observations of Dr. Beatty relative to the frequent necessity of "temporising" in cases of hæmorrhage from placenta prævia, where there existed a rigid condition of the os and cervix, illustrated the main point at issue between Dr. Greenhalgh and Dr. Barnes. Dr. Greenhalgh in such cases advised the use of the vaginal plug, an abdominal bandage with which to maintain pressure on the uterus externally, and the administration of ergot; while Dr. Barnes maintained that his cervical dilators by themselves efficiently superseded the use of the plug, the bandage, and the ergot, inasmuch as while they were dilating the os and cervix, they simultaneously prevented hæmorrhage and excited uterine action. In this estimate of their utility, Dr. Gervis entirely concurred. Instead of temporising in any manner, or trusting for the accession of labour to the use of ergot, by these bags you obtained full control of the case from beginning to end; and after adequate dilatation of the os, you could either separate the placenta from the official zone, rupture the mem-

branes, and then, if that sufficed to check the hæmorrhage, leave the case to nature, or by the bimanual method of version complete it at will. It was not, of course, meant that the dilators were always needed; but their particular value appeared in those cases where but for their use mere temporary measures had to be adopted until the os had sufficiently dilated to permit of operative procedure, and so possibly lead to a delay that might prove fatal.

Dr. OLDHAM also agreed that it was important to take steps at once in any case of placenta prævia to accomplish delivery—a plan, he thought, admitted by most practitioners in London, and one upon which he had always acted. However, to effect this object, he believed that nothing was more easy or satisfactory than to turn by the plan recommended by Dr. Braxton Hicks, and to bring down the child into the os. He (Dr. Oldham) had only the night before a case where its application was most satisfactory. He considered the plug, which had been recommended for many years, might be used where the cervix was very rigid, and preventing the introduction of the finger; but its chief advantage was as a provocative of labour, and he doubted if it would be equal to stop hæmorrhage.

Dr. GREENHALGH stated, in reply, that he was very pleased to learn from the several speakers that in these cases they had, one and all, adopted the plan of early delivery advocated in his paper, and mostly with satisfactory results to the mothers, which he maintained was not the course recommended in the standard treatises on midwifery or pursued by practitioners in general. He believed that the great success to the children in his cases was mainly due to not separating either a part or the whole of the placenta from the uterus, to retaining the membranes intact until dilatation of the parts had been effected by the pains and plug, and by avoiding version in cases of head presentation, which entailed more or less risk upon mother and child. He was quite convinced that with these precautions a premature child, whose head was small and easily compressible, stood as good, if not a better, chance of being born alive than a child at term. In allusion to the plug, he stated that some years ago, as mentioned in his paper, he had used an inflated India-rubber bag, but had found it ineffectual in arresting the flow of blood from the vagina, which he had never failed to control, no matter how severe, with the spongio-piline plug. He considered the effects of the plug to be as follows:—1, to prevent the escape of blood from the vagina; 2, to favour its coagulation in the upper part of that canal; 3, to excite uterine action; and, 4, to dilate the passages. The author approved and adopted the practice of rupturing the membranes in slight cases of partial placental presentation, and of turning in certain malpositions of the child; but he said that he had not alluded to this class of cases in his paper. Dr. Barnes having stated that the statistics of Dr. Read were not trustworthy, and that the author of the paper had estimated the mortality to the mothers too high, Dr. Greenhalgh urged in confirmation the results of the practice of the Dublin Lying-in Hospital, and of his own early experience in cases of placenta prævia. In conclusion, he trusted that after the expression of opinion of so many eminent accoucheurs, there could be no doubt whatever as to the propriety of early delivery in these cases, upon which the ultimate safety of the mother mainly depends.

SUNDERLAND MEDICO-CHIRURGICAL SOCIETY. Dr. Joseph Brown has been elected president; Mr. William Dixon and Dr. Thomas P. Parker, have been elected vice-presidents; and Dr. Henry John Yeld honorary secretary and treasurer.



## Correspondence.

### THE MEDICAL PROVIDENT FUND.

LETTER FROM WILLIAM WEBB, M.D.

SIR,—The scheme submitted to the Annual Meeting at Cambridge by our distinguished associate, Dr. B. W. Richardson, with a view to the formation of a "Provident Fund", in connection with the British Medical Association, deserves the careful consideration of every medical man.

The necessity for such a Fund, must be patent to all who have perused the lists of the Royal Medical College and the Benevolent Fund.

It is a painful fact, that medical men, however large their practice, or extensive their acquaintance, seldom—in the country, at least—realise a competency for their families; and with the knowledge of this distressing truism, and of the necessity as we advance in practice of increased expenditure to maintain our position, ought we not, one and all, at this crisis, to reflect, whether we would not rather than contemplate the idea of those nearest and dearest to us being dependent upon the charity and benevolence of others, to make a little sacrifice in health, to provide (as does the working man by his friendly society) for the contingencies of sickness, disease, accident, and old age? I say "old age", sir; because I am satisfied that no scheme can be thoroughly accepted by the large body of the profession which proposes to give no sick pay after the age of sixty.

Mr. Carter's protest against confining the provident fund to members of the Association, is a reasonable one; for if it be beneficial to the few, why circumscribe the area of its professional influence?

Let us hope, therefore, that Dr. Richardson and his coadjutors (amongst whom, if I mistake not, is the benevolent Mr. Daniell, who may fairly be considered as the originator of this movement) will be induced to reconsider this scheme, and so to alter and amend it as to make it generally acceptable to the medical profession of this country.

I am, etc., WM. WEBB, M.D., F.R.C.S.(exam.)

Windsor, August 16th, 1864.

LETTER FROM THOMAS MARTIN, ESQ.

SIR,—Having read with great satisfaction the report of proceedings at the meeting at Cambridge, I wish, with permission, to offer a few observations on what was said and done in respect of a Provident Fund as an appendage to the Association; and this I do with the more confidence from having had great experience in the operation of friendly societies or benefit clubs, as they are called, having assisted in the management of various societies in and out of the profession, and from my knowledge of the medical profession itself in the course of a long life.

All societies may be supposed to be friendly; but the legislature has always designated one form of society only as being friendly.

Throughout the country, these have been got up, professedly for the benefit of the members, but really and in effect for the benefit of the public-house; and they do more harm than good to the members. From bad management and all sorts of blunders, they sooner or later fail and go to wreck.

Disgusted with these pot-house clubs, seventeen years ago, I started a club that should be unexceptionable and never go near the public-house. Its organisation and administration are so complete, that it stands among the highest in Mr. Tidd Pratt's

estimation; and he is himself an honorary member, as denoting his high approbation.

That society contemplates several forms of benefit; and permit me to observe that the word *relief* is inappropriate as respects your Provident Fund, which is not a charity—the subscribers having a right to demand that which they have paid for. In the whole period of seventeen years, during which I have officiated as the honorary secretary and medical referee of the Reigate Victoria Club, I have never once made use of the word *relief*.

From my experience, therefore, in these matters, and from my knowledge of the proceedings of our Surrey Benevolent Medical Society with which I have been connected from its origin, fifty-two years ago, I would beg to submit:

1. That the Provident Fund should provide for benefit in sickness only; excepting that it might perhaps include an endowment for children.

2. That it should be constituted and governed by a code of well considered rules and tables, and administered by a board of directors of professional gentlemen, to whom may safely be confided the necessary powers, having allegiance to a general meeting, annual or occasional.

3. That, as in other societies for life-assurance, there is nothing humiliating in submitting to a proper investigation as to the state of health of candidates for admission.

4. That the fund should not be encumbered with a charter.

5. That it should not provide for a deferred annuity, nor any other form of benefit than payment in sickness, excepting, as I have already stated, perhaps an endowment for children.

Permit me to conclude by observing, that the Provident Fund, prudently and judiciously managed, as it will be, will realise the best hopes and expectations of those who engage in it.

I am, etc.,

THOMAS MARTIN.

Reigate, August, 1864.

### ARMY MEDICAL DEPARTMENT.

SIR,—I have just seen the report of the annual meeting of the Association at Cambridge, and think it necessary to say a few words regarding what was said about the army medical service. I see that Dr. Wood (London) expressed an opinion that the grievances of the army medical officers are exaggerated; and he seems to have great confidence in the disposition of the authorities to do what is right. But, sir, that gentleman does not appear to have much knowledge of the subject. He gave a very absurd account of a medical officer's relative position, altogether fancied.

The medical officers have never made any complaint of the relative rank assigned them; but, on the contrary, have at all times expressed their entire satisfaction on that subject. What they complain of is, that the authorities do not respect their rank; that the privileges attaching to their relative rank are systematically withheld; and that, in fact, their relative rank exists only on paper. Now all the disadvantages (or nearly all) result from the fact of the names of medical officers being placed in the *Army List*, and other official documents, after those of all other officers without respect to rank, and the effect of this arrangement is to render the true position of the medical officer, at best, a matter of doubt, and to bring relative rank into contempt. There can be no reasonable objection to the names being so arranged, as to plainly indicate the precedence to which each individual officer is entitled. This may appear trifling at first sight, but it really is not so. It is not

merely the order in which the names appear which is important, but it is the *consequences* which result from that order. At present, the medical officer suffers very serious disadvantages from his name appearing last in the list instead of according to his relative rank. I may instance the matter of quarters, and invitations on public occasions. I have frequently seen a medical officer obliged either to occupy an inferior quarter, or else assert his true position, and enter into an argument with a junior officer, in order to prove his right to that which the junior has taken possession of in consequence of this faulty arrangement of names. That is not a sentimental grievance. Again, it frequently happens that invitations are given in accordance with the rotation of names in the *Army List*. I have seen subaltern officers receive invitations before surgeons, although the surgeons hold relatively the rank of major. That is not a sentimental grievance. Now, I maintain that measures should be taken by the authorities to render the true relative position and precedence so evident, that such evils could not possibly occur.

Before I conclude, I wish to say a few words about the "power of arrest." I find that Dr. Sibson stated that it was not desired that the medical officer should have that power; and he evidently believes that at present he has not got it—indeed, I think the Director-General stated that he had not. Now that is an erroneous idea. Whether or not the possession of that power is an advantage, may be matter of opinion; but it is conferred by act of Parliament. Turning to the "Articles of War," under the head of "Maintenance of good order," we read the following paragraph.

"All officers, of what condition soever, have power to quell all quarrels, frays, and disorders, though the persons concerned should be of superior rank, or belong to another corps, and either to order officers into arrest, or soldiers into confinement, until their proper superior officers shall be acquainted therewith." From that "article," I think it is clear that medical officers have the "power of arrest." I know that, were certain circumstances to occur necessitating the exercise of that power, they would most probably be severely blamed if they failed to exercise it. The want of that power is felt in the army as a degradation, and a manifest proof of inferiority of position; and therefore it is that we now hear it gently insinuated (for it has never been openly and officially announced) that medical officers are excepted when the expression "*All officers, of what condition soever*" is made use of. I think, myself, that although the power is very rarely exercised, and should be exercised with very considerable caution, it is decidedly necessary, and for the advantage of the public interests, that the power of arrest should not be withdrawn from medical officers. We cannot imagine that they are more likely to abuse that power than other officers.

I would especially commend the matter of precedence of names to the serious consideration of the Association. I am, etc.,

"FORTIS EST VERITAS."

#### RESPONSIBILITY ATTACHING TO CHLOROFORM ADMINISTRATION.

LETTER FROM THOMAS SKINNER, M.D.

SIR,—I perfectly concur with the justice of the remarks on the above important subject in a leader in last week's number of the JOURNAL; only, I think I should be inclined to go a little further, and look upon the surgeon or operator as the only responsible party in the matter; the chloroformist being neither

more nor less than one of the staff of assistants now found to be absolutely necessary for the safe conduct of a surgical operation. In amputation of the thigh or at the hip-joint, would not the operator be held in the fullest sense responsible, if the patient died from an inefficient assistant having been trusted with the control of the femoral artery? Undoubtedly, he would; and I hold that all surgeons or operators in surgery are the only parties responsible for their assistants, either in public or in private practice.

Unless the operating surgeon himself thoroughly understands the physical and physiological properties of chloroform, and the best means of administering it, so far as is known; and unless he watches his assistant, and corrects him when wrong, or otherwise shows him the best way under a multitude of varying circumstances—how are we ever to have reliable chloroformists bred in our hospitals or elsewhere?

I have seen a great deal of hospital practice and surgical operations under chloroform since 1847; and I must confess that I have in general been struck with the all but total indifference on the part of the most distinguished operators to the induction of the anæsthesia, as if it were a part of the operation in which they had little or no concern. I have actually seen one most imprudently talking to his audience as to the nature of the operation he was about to perform, whilst the anæsthesia was in process of induction.

Now, I have no hesitation in stating that, if the surgeons knew the best method or methods of administering chloroform, they ought certainly to have better instructed and trained their chloroform assistant on the occasion to which I refer, and thereby have given the patients, themselves, and their most patient admirers on the benches, the benefit of it. If they did not know better than their assistant, then I hold that they are as bound to inform themselves of this part of their duty, as of the all-important and skilful part which they themselves are specially called upon to perform during surgical operations.

In the cases I have stated that I saw in London, the chloroform was administered on lint, in half-drachm doses, and held over the face of the patient whilst lying on his back. Under these conditions, I very much question if one-half of the chloroform ever penetrates to the patient's lungs. The vapour of chloroform being much heavier than common air, a portion of it gravitates over the cheeks and chin, and otherwise escapes the air-passages; some is driven off by the patient during expiration; and a still greater quantity is lost in another way, of which the chloroformist on this occasion seemed perfectly unaware; namely, by putting so small a dose on the lint as half a drachm, say that nearly one-half is lost as I have stated, the anæsthesia already induced is almost dissipated before the dose is renewed. The chloroformist withdrew the lint each time from the patient's face, and extended it towards the "bottle-holder", to have the dose carefully measured and poured on the lint. Need any one wonder that, by such a method, twenty minutes were consumed in inducing insensibility? and need we wonder that, even after ten minutes' inhalation in one case, the patient "was complaining of pain during most part of the operation"? I should positively feel ashamed of myself, if I failed to induce, with average safety, the deepest anæsthesia in ten minutes.

I lately saw a series of brilliant operations performed at a first-rate metropolitan hospital; and in no case was the induction of the anæsthesia produced in less than ten minutes; in one case it was only in twenty minutes.

Let me repeat: 1, that I hold there is no person



responsible for an accident attending the administration of chloroform during a surgical operation, except the surgeon who has undertaken the responsibility of the operation; 2, that it is the duty of every surgeon to perfect his knowledge of the safest and most effectual as well as economical methods of administering all anæsthetic agents; 3, that, knowing that all the responsibility must of necessity rest with himself alone, the operating surgeon cannot be too careful in the selection of his assistants, particularly of his chloroformist.

Apologising for the length of this epistle,  
I am, etc., THOS. SKINNER, M.D.  
Liverpool, August 20th, 1864.

## PUNCTURE OF THE BLADDER.

LETTER FROM EDWIN MORRIS, M.D.

SIR,—Mr. T. Paget's high position as a practical surgeon, and his long standing and great experience, entitle any opinion or suggestion of his to be received with the greatest respect; and no one is more ready to do this than myself. I do not, however, agree with him relative to his treatment of retention of urine from impracticable stricture. Mr. Paget, in a communication in your last number, gives a preference to puncture of the bladder above the pubes to the perineal section; stating, "I am convinced that tapping above the pubes, and micturition afterwards by a short tube regulated by a plug or screw stopper, is for a patient past sixty years of age, and perhaps for others, a far better course of treatment than perineal section, though certainly not so glorious for an aspiring operator."

The paper upon this subject, to which Mr. Paget alludes as having read at the Midland meeting in 1859, I had the pleasure of listening to; and at the time thought his remarks very pertinent and feasible. Having some experience in the matter, I can no longer agree with Mr. Paget in considering puncture of the bladder above the pubes is "far better" than perineal section, and, although the latter may be a more "glorious operation", the former is nevertheless an easy and ready way of getting out of a difficulty. Surely great annoyance and inconvenience must be experienced by a person having an elastic gum catheter constantly protruding through the walls of the abdomen, and with no attempt at relief of his impracticable stricture. This is a gloomy and disheartening condition for any man, even an aged one, to be placed in; considering, too, the many appliances we have for the permanent cure of impracticable stricture, first and foremost of which stands Syme's perineal section. The following two cases, briefly given, will bear me out in this opinion.

CASE I. Frederick Smith, aged 63 years, was admitted May 24th, 1864, into the Spalding Union Infirmary, suffering from retention of urine from impracticable stricture. He stated that he had had a stricture for many years, and for a long time his water only "came away in drops". Upon examining the abdomen, it was much enlarged; and the distended bladder could be distinctly felt. The man was in great agony, and would submit to anything that would "pass his water". I tried in vain to pass a catheter down the urethra; and, as something must be done at once for the man's relief, I determined upon dividing the stricture according to Syme's method. I did this most freely, and without much difficulty passed a No. 8 silver catheter into the bladder, and relieved it of a quantity of most offensive urine. After a few days, I replaced the silver by an elastic gum catheter; and this he has worn ever

since, changing it every fourth or fifth day. The wound in the perinæum has healed over. He occasionally passes his urine *per vias naturales*, without the aid of a catheter; but at present prefers wearing it. He has a free passage now, and can take out the catheter, clean it, and pass it again himself. He has improved in health, gained flesh; and is, to use his own expression, "a better man than ever".

CASE II. John Whyley, aged 72, was admitted July 26th, labouring under a distended bladder from impracticable stricture. He had had difficulty in passing his urine for years. He said he had not passed water for the past three days. His body was much swollen and tender. I failed to pass a catheter. His penis was much distended and discoloured. I divided the perinæum freely; laid bare the strictured part of the urethra; divided it; and passed the catheter into the bladder, and emptied it of its offensive urine. The man became very ill, with typhoid symptoms. I gave him bark, ten ounces of port wine daily, beef-tea, etc. He soon recovered. The wound is looking healthy, the urine passing through the catheter, and the bowels acting regularly. I replace the catheter every fourth day with a new one, as they become furred up and useless.

Both men are still in hospital, and under treatment.

With due deference to Mr. Paget, I must claim for my patients a better state of things than his, for the following reasons. They were at once relieved from a dangerous condition; and at the same time, by the same operative surgical procedure, cured of their stricture, and left to do at their pleasure what Nature intended they should do—pass their urine through the penis.

I hope Mr. Paget will receive the above remarks in the same spirit in which they are written. I trust he knows me too well, to suppose otherwise than that the only object I have in replying to his remarks is simply to contrast one method of treating a most dangerous disease with another, and thus enable us to judge of that which is best for the patient—the great object we all have in view.

I am, etc., EDWIN MORRIS.

Spalding, August 23rd, 1864.

A TRUE CURE FOR THE ARMY DISEASE. The order relating to the new system of regimental workshops, published by the Commander-in-Chief at Simla, has been printed. It sets forth, with just congratulations, the success of the new system which has been introduced among the regiments serving in India. The system was set on foot by a general order in September 1861, and has now become established with success in five regiments of cavalry and thirty-two battalions of infantry. The occupation of gardening has been very successful. Soldiers, it is found, take great pleasure in small gardens. This system of barrack gardens in their regiments is to be promoted to the utmost. The Commander-in-Chief also commends the industrial system for children, which has been carried out with good effect in several regiments. Generally speaking, throughout the army in Bengal manly exercises and out-door recreations are practised, and there is a number of cricket clubs, etc. Every regiment has its reading and recreation room, well furnished and fitted, and the increasing popularity and success of regimental libraries is evidenced by the growing number of subscribers. To this system has been traced a considerable decrease in the consumption of ardent spirits by the army. Englishmen at home will all join in the congratulations which the Commander-in-Chief expresses at the success of a system such as this.

# Medical News.

UNIVERSITY OF LONDON. The following candidates have passed the first M.B. Examination.—Entire Examination.

## First Division.

Bateman, Francis, St. Bartholomew's Hospital  
Buschell, Stephen Wootton, Guy's Hospital  
Cole, Thomas, St. Bartholomew's Hospital  
Howse, Henry Greenway, Guy's Hospital  
Irvine, James Pearson, B.A., University College  
Nunneley, Frederic Barham, University College  
Philpot, Charles William, King's College  
Shaw, Thomas Claye, B.A., King's College  
Taylor, George Christopher, St. Bartholomew's Hospital  
Welch, John Burges, King's College

## Second Division.

Adams, Arthur Bayley, London Hospital  
Ball, John Augustus, Guy's Hospital  
Beck, Marcus, University College  
Berrell, Charles, King's College  
Berry, Othel Windsor, Charing Cross Hospital  
Buckell, Francis John, University College  
Clothier, Henry, University College  
Eastes, George, Guy's Hospital  
Kelly, Charles, King's College  
Lloyd, John, Queen's College, Birmingham  
Smith, Charles James Hardy, University College  
Spencer, George Othwaite, University College  
Taylor, Arthur, Guy's Hospital  
Warren, Thomas Pickard, Guy's Hospital  
Williams, John, University College

Excluding Physiology.

## First Division.

Hughes, John Pearson, University College

## Second Division.

Birtwell, Henry Hargreaves, St. Thomas's Hospital  
Evans, Julian Augustus Michael, University College  
Ferris, John Spencer, King's College  
Gooding, Ralph (B.A.), King's College  
Grimes, John, King's College  
Legg, John Wickham, University College  
Orton, George Hunt, St. Bartholomew's Hospital

Physiology only.

## First Division.

Glynn, Thomas Robinson, St. Bartholomew's Hospital  
Hilliard, Henry Charles, Guy's Hospital  
Hooper, John Harward, St. Thomas's Hospital  
Mickle, Arthur George, Guy's Hospital  
Turner, Ebenezer Falham, Guy's Hospital  
Woodhouse, Thomas James, St. Thomas's Hospital

## Second Division.

Aldersey, William Hugh, Guy's Hospital  
Harvey, Walter Anstce, St. Bartholomew's Hospital  
Norton, Arthur Trehern, St. Mary's Hospital  
Read, Charles, University College

UNIVERSITY OF EDINBURGH. The following candidates received the degree of Doctor of Medicine on August 1st. The mark *a* indicates those who have obtained prizes for their dissertations; *b*, those deemed worthy of competing for the dissertation prizes; and *c*, those commended for their dissertations.

Anderson, Robert, Scotland  
Baker, Robert, England  
Banks, William Mitchell, Scotland (*a*)  
Barnes, Henry, England (*c*)  
Barss, Andrew de Wolf, Nova Scotia  
Belgrave, Thomas Bowenman, England  
Bentham, Thomas, England  
Bottle, Alexander, England  
Brims, James, Scotland  
Bruce, William, Scotland  
Carmichael, James, Scotland  
Carter, William, England  
Chastellier, Evonor, France  
Clifton, Herbert, England  
Conyers, James Salus, Bermuda  
Cornish, George Bishop, England  
Crawford, William Thomson, Scotland (*c*)  
Crichton, James Smith, Scotland (*b*)  
Cunningham, Robert Oliver, Scotland (*b*)  
Easton, Thomas, England (*c*)  
Eaton, George, England  
Drummond, Edward, England  
Edmondson, John Edwin, England (*c*)  
Elmhurst, William Jackson, M.A. Aberdeen, Scotland

Fox, Cornelius Benjamin, England (*b*)  
Grosvenor, Alfred Octavius, England  
Gunn, Robert, Scotland  
Hamilton, David, Scotland  
Harrison, Thomas Laurence, Shetland  
Henderson, Edward, Scotland  
Hope, James Johnstone Hyslop, Scotland  
Howes, Frank Charles Plumptre, England  
Hughes, David Erskine, Scotland  
Irvine, William Skipton, Ireland  
James, Henry Northage Land, England  
Jones, Andrew Pugsley, New Brunswick  
Joyce, Thomas, England  
Laing, Alexander, Scotland  
Livingstone, Robert Hamilton, New Brunswick  
Lorraine, Walter, Scotland  
McAndrew, Andrew Watson, Orkney  
McCluskey, Joseph Richard, Ireland  
McDonnell, Angus, M.A. Aberdeen, Scotland (*c*)  
McKenzie, Stephen Gault, Calcutta (*b*)  
McNeill, William, Scotland  
Meek, John, Robert Morris, East Indies (*c*)  
Messer, Thomas John Fordyce, Scotland  
Miller, Alexander Gordon, Scotland  
Moffat, John, Isle of Man  
Montzambert, Frederick, Canada  
Morsou, Alexander Kinnear, England (*c*)  
Mouat, George Bridges, Scotland  
Munro, Alexander Donald Neil, Scotland (*b*)  
Naukivell, Herbert, England (*c*)  
Nash, Edmund, England (*c*)  
Nivison, Thomas Renny Strachan, Scotland (*c*)  
Oliphant, John, Scotland (*c*)  
Parsons, Charles, England (*a*)  
Purves, William Laidlaw, Scotland  
Renton, William Matthew, England  
Rigg, Thomas, England  
Roberts, John, Wales (*b*)  
Roberts, Thomas Edward, Gibraltar  
Robertson, Schoedde, Ireland  
Semple, William Henry, Scotland  
Sewell, Colin Charles, Canada  
Shears, Arthur, England  
Shedden, Arthur William, East Indies  
Sheldon, William, England  
Sinclair, William, Scotland  
Skimming, Robert, Scotland  
Smith, James Taylor, England  
Squires, William Westbrook, France  
Taylor, Herbert, Darmstadt (*b*)  
Taylor, John William, Scotland  
Thomas, David, Wales  
Thomson, James Clements, East Indies  
Thomson, Robert Bremner, Scotland (*a*)  
Thorburn, David Arno Smet, Scotland  
Turnbull, George Hogarth, Scotland  
Veitch, Andrew, Scotland  
Walford William, England  
Warter, John Soutby, England (*c*)  
Watson, Alfred Marchmont, Jamaica (*a*)  
Watson, James, Scotland  
White, Francis Buchanan White, Scotland (*c*)  
White, John Gregory, England  
Wickwire, William Nathan, Nova Scotia  
Williams, Eytton Owen, England  
Wood, Joseph, England  
Workman, Charles John, England (*c*)  
Wright, Joseph Brampton, England (*b*)  
Wright, Robert, Scotland

APOTHECARIES' HALL. On August 18th, the following Licentiates were admitted:—

Cropp, Frederick John, Clapham  
Green, Thomas Henry, Saffron Walden  
Lightbody, John, Kirby Moorside, Yorkshire  
Spooner, Edward Menor, Llandford, Dorset  
Taylor, Francis Henry Wickham, Camberwell

At the same Court, the following passed the first examination:—

Butler, William Harris, Guy's Hospital

## APPOINTMENTS.

BATEMAN, Frederic, M.D., appointed Physician to the Norfolk and Norwich Hospital, in the room of \*W. H. Ranking, M.D.  
COOMBS, William G., M.D., appointed Assistant Medical Officer to the Dorset County Lunatic Asylum.  
DAVIES, J., Esq., appointed Assistant House-Surgeon to the Stockport Infirmary.  
MOWAT, George, Esq., elected House-Surgeon and Apothecary to the Swansea Infirmary.  
RICHARDS, Joseph P., Esq., appointed House-Surgeon to the Stockport Infirmary.  
THOMAS, Griffith R., Esq., elected Surgeon for Out-patients to the Swansea Infirmary.



**POOR-LAW MEDICAL SERVICE.**

ATKINS, N. F. H., Esq., to the Buntingford District of the Boston Union.  
 DAVIDSON, Frederick, M.D., L.R.C.P. Ed., to No. 4 District of the West Ham Union, Essex.  
 HARRIS, James S., Esq., to the Workhouse and District No. 1 of the Bridlington Union, Yorkshire.  
 HAWTHORN, John, Esq., to District No. 4 of the Newcastle-on-Tyne Union.  
 ISANOE, Richard, Esq., to the Conwil District of the Carmarthen Union.  
 McNEIL, William, M.D., to the Parochial Board of Port Patrick, Wigtownshire.  
 NEWTON, Henry W., Esq., to District No. 2 of the Newcastle-on-Tyne Union.  
 PEARSE, John S., M.D., to District No. 1 of the Newcastle-on-Tyne Union.

**ARMY.**

FRANKLIN, Surgeon H. B., M.D., 10th Foot, to be Staff-Surgeon, *vice* W. Sinclair.  
 KING, Surgeon G. S., M.D., 11th Foot, to be Surgeon 96th Foot, *vice* B. Swift, M.D.  
 MACKENZIE, Assistant-Surgeon J., 10th Foot, to be Staff-Assistant-Surgeon, *vice* F. L. Scotland.  
 SCANLAN, Staff-Assistant-Surgeon F. E., to be Assistant-Surgeon 10th Foot, *vice* MacKenzie, M.D.  
 SINGLAI, Staff-Surgeon W., to be Surgeon 16th Foot, *vice* H. B. Franklin, M.D.  
 SWIFT, Surgeon-Major B., M.D., 96th Foot, to be Surgeon 14th Foot, *vice* G. S. King, M.D.

**VOLUNTEERS. (A.V.—Artillery Volunteers; R.V.—Rifle Volunteers):—**

MONKTON, D. H., M.D., to be Honorary Assistant-Surgeon 21st Staffordshire R.V.

**DEATHS.**

BUSH, Michael A., M.D., at Highwoods, Whittle, Essex, on Aug. 18.  
 FIELD, James, M.D., at Richmond, aged 81, on August 23.  
 HUTCHINSON. On August 24th, at Herne Bay, Anne Sarah, widow of John Hutchinson, M.D.  
 LEWIS, James L., Esq., Surgeon, at Grove's End, Glamorganshire, aged 53, on August 15.  
 \*STONE, Thomas Arthur, Esq., at 20, Grosvenor Street, aged 67, on August 20.  
 THOMAS, Robert Thomas, M.D., F.R.S., at Richmond, aged 53, on August 17.

**THE MEDICAL BENEVOLENT COLLEGE.** Lord Granville has accepted the presidency of the medical college at Epsom.

**BUCHAN MEDICAL SOCIETY.** Mr. William A. Gavin has been elected president for 1864-65; and Dr. William Bruce has been re-elected secretary.

**THE INTERNATIONAL CONGRESS** held its second meeting the week before last at Geneva. Professor Longmore, and Dr. Rutherford, Inspector-General represented England on the occasion.

**ILLEGAL RECEPTION OF A LUNATIC.** Mr. Henry Wilkins of Ealing Green, has been admitted to bail for trial at the instance of the Commissioners of Lunacy, charging him with having received a lunatic without being properly licensed to do so.

**ST. BARTHOLOMEW'S HOSPITAL AND COLLEGE.** The following scholarships have been awarded at the close of the Summer Session of 1864: W. J. Garrett, W. Square, and W. J. Tattersall; C. D. Batt *proxime accessit*.

**THE POISONING OF SEAMEN.** The inspector of meat at Sunderland has recently died at that place, of fever, produced by the effluvia from some casks of provisions which he seized before they could be got on board a vessel.

**BEQUESTS.** The following amongst other bequests have been left by the late Mr. Thomas Robinson, of Sandford House, Bootle, to the hospitals, etc., connected with Liverpool: Royal Infirmary, £1,000; North Dispensary, £600; South Dispensary, £600; Blind Asylum, £500; Blue Coat Hospital, £500; Northern Hospital, £500; Southern Hospital, £500. The late Mr. Martin Thackeray has left £500 to the Bedford Hospital.

**DEPOSIT OF THE NILE.** Dr. Muspratt gives the following as the principal constituents of the mud of the Nile: silicic acid, alumina, proto-and sesquioxide of iron, with traces of phosphate of alumina, and organic matter containing ammonia.

**DIAGNOSIS BY BALLOT.** At a meeting of the Illinois State Medical Society, the members balloted on a case presented. "The result of the vote was as follows:—Psoriasis inveterata, 5; skin disease, 1; eczema rubra, 5; tetter, 1; rara avis in terra, 1; leprosy, 3; natrum muriaticum, 1; psora, 1; blank, 3; Persian leprosy, 2." (*Chicago Journal*.)

**THE FEDERAL ARMY.** From May 9th, 1864, to June 10th, the medical department sent to Belle Plain, Fredericksburg, Port Royal, and White House, surgeons (volunteer, contract, and regimental), nurses, medical students, and attendants, to the number of one thousand, viz.: surgeons 580; volunteer aid corps, 194; contract physicians, 42; regimental, 10; number of nurses, medical students, etc., 165.

**THE LEGION OF HONOUR.** At this season of the year all France is divided into two classes—those who are already members of the Legion of Honour, and those who hope to become so. Pages of the medical journals are filled with the names of medical men who have been this year added to the long list of those who are already entitled to wear a bit of red ribbon in their button-hole.

**DR. SIEVEKING** will accompany the Prince and Princess of Wales to Copenhagen. The Royal party will leave Scotland (*via* Dundee) for that city in the first week of September. Dr. Sieveking at the end of September will give up the charge of the Prince and Princess to Dr. Minter, and return to England—the Prince considerably not wishing Dr. Sieveking to remain too long away from London. The Royal infant will, we believe, return to England with Dr. Sieveking.

**TEA, COFFEE, AND SUGAR.** The consumption of sugar per head throughout the United Kingdom is 37lbs. That of coffee has decreased in England; in 1841 nearly 1lb. 8oz. was consumed, but now it is scarcely 1lb. 5oz. per head. Of tea in 1841, we consumed in the United Kingdom 36,675,667 lbs. or 1lb. 6oz. per head; in 1861, 77,927,750 lbs. or 2lbs. 11oz. per head.

**DAMAGES FOR POISONING BY MISADVENTURE.** At the recent Liverpool assizes, an action was brought by a widow, who sought to recover from a chemist £3,000 for the loss of her husband, who had died in consequence of taking poison, supplied by mistake for medicine by one of the defendant's assistants. Before the case was opened, however, a verdict for £1,500 was taken by consent—£500 being given to the widow, and £500 to each of her two younger children.

**WAR.** A ride of four hours brought us to Fredericksburgh, where we reported to Surgeon E. B. Dalton, Medical Director. There were at that time not far from four thousand wounded in the city, scattered throughout all the available buildings, as churches, hotels, stores, warehouses, etc., etc. On first entering these suddenly extemporised hospitals, we were struck with the utter destitution of all medical and hospital supplies. The patients lay thickly upon the floors, with only their dirty, tattered, blood- and pus-be-smear'd garments under and around them, and neither bandage, lint, nor old linen could be obtained to dress their offensive wounds. There was also great destitution of food, especially such as the severely wounded require. There can, however, be no blame attached to the medical department for this absence of hospital supplies. (*American Medical Times*.)

DR. BROWN-SÉQUARD AND THE HARVARD UNIVERSITY. It will be gratifying to all interested in medical education and the college, to learn that a professorship of the Physiology and Pathology of the Nervous System has been established by the corporation, and that the greatest teacher in this branch of medicine of the day, Dr. E. Brown-Séquard, has been appointed to fill the chair. This distinguished physiologist has fixed his residence permanently among us. (*Boston Journal*.)

PRISON DIETARY. The commissioners, in their report, speaks as follows of the present gaol diet. "In accordance with your directions, a board of medical officers was assembled to examine and report on the whole question of the dietary of the separate prisons. The board has since made its report, and the dietary recommended by it has been adopted at Millbank and Pentonville, Brixton, and Parkhurst. It differs considerably from the old diet, and contains only 284oz. of solid food per week as against 306oz per week in the dietary formerly in use, but it is more varied, and there seems no reason to doubt it is a very sufficient dietary. The dietary of the public works prisons has also been carefully considered by a board of medical officers, and an amended uniform diet recommended, which has been approved and ordered to be gradually adopted. It involves a very large reduction in the old scale of diet, viz., a reduction from 352oz. per week to 299oz. per week of solid food, or nearly one day's food in the week."

DEATH OF DR. R. DUNDAS THOMSON. On the 17th inst., Dr. Robert Dundas Thomson expired at Richmond, where he was on a visit to his brother. In the medical world Dr. Thomson occupied a high rank, both as an author and professor, while the many public offices in which he practised, and the honorary positions which he filled, brought him prominently into connection with the public. He was in the 54th year of his age. His first degrees were taken in Glasgow, in which university he afterwards held the chair of chemistry. In 1859, he became a member of the Royal College of Physicians, and was elected a Fellow of the College during the present year. He filled the chair of chemistry at St. Thomas's Hospital for many sessions, and was physician to the Scottish Hospital and to the Blenheim Free Dispensary, of which he was one of the founders. He was a Fellow of the Royal Society, and of several medical societies in London and Edinburgh, also of the Chemical Society; and was president of the British Meteorological Association. He also occupied the position of medical officer of health to the parish of Marylebone.

THE HÔTEL DIEU is said to have been founded in the twelfth century by St. Landry, Bishop of Paris. It was enlarged during the reigns of St. Louis, Henry IV, and Louis XIV. Two fires caused great destruction in the Hôtel Dieu between the years 1737 and 1772; and a great number of patients were burnt to death during the second fire. During the reign of Terror the Hôtel Dieu was called "Maison de l'Humanité." The Minister of the Interior laid the first stone of the present portico on the 1st Vendémiaire, year 12. On entering the Hôtel Dieu a statue of St. Vincent de Paul is to be seen on the left, and of Montyon on the right. The grand staircase is decorated with portraits of the most celebrated physicians and surgeons attached to the hospital. Several inscriptions on tablets record the various *ordonnances* relative to endowments. One inscription contains the celebrated ode, composed by Gilbert at the Hôtel Dieu, entitled *Au Banquet de la Vie*. Underneath is written "Gilbert, eight days before his death; 22 years of age."

TETANUS IN THE AMERICAN FEDERAL ARMY. Tetanus has prevailed among the wounded of the Army of the Potomac to an unusual extent. Upwards of fifty cases occurred within a short period at Fredericksburg and in the hospitals at Washington. Nearly every case proved rapidly fatal. We are glad to learn that Dr. Brown-Séquard, of London, now in this country, has consented to give a lecture on this disease, at Washington, where it is now most prevalent. (*American Medical Times*.)

INQUESTS IN 1863. In the year 1863 as many as 22,757 coroner's inquests were held in England and Wales. The juries brought in 207 verdicts of murder; 203 verdicts of manslaughter; 1,385 of suicide—an increase of nearly 8 per cent.; 323 of death from excessive drinking—more than double the number in 1862; 140 of death from want, cold, and exposure. The verdicts of suicide were on 1,048 men and 337 women. 3,664 of the inquests—a proportion as one in every six—were upon infants not more than a year old, more than a fourth of them illegitimate; and verdicts of murder were recorded in 166 of these cases. No less than 79 of those verdicts of murder were in Middlesex.

THE FEDERAL ARMY MEDICAL SERVICE. In a volume containing a collection of tourists' tales, etc., entitled *Vacation Tourists and Notes of Travel* in 1862-3, there is an account of the Federal army medical service. Mr. Charles Mayo, who was in the medical service of the Federal army, recounts what a reckless and ill-organised service it was, and how much worse it might have been but for the sanitary commissioners there. He acknowledges his debt of information to the South for one or two pieces of knowledge which he did not possess previously. "One of these is, that the stories about the cruelty, brutality, sensuality, ignorance, and ferocity of the slave-owners, on which we have formerly been fed, are mere inventions in the greater number of cases; I believed this to be so before, but I never knew it for certain until I had been in the South."

TORTURES OF WAR. A medical member of the Sanitary Commission writes from Washington. "In 20,930 wounds, 749 were compound fractures of femur; and of this number 480 were transported unamputated. Again, of the knee there were 242 wounds, and of these 138 were transported unamputated. Of the leg, there were 948 gunshot fractures, of which 650 remained unamputated. There were at the same time 566 gunshot-wounds in the lungs and thorax. It has been found that any one of the transported fractures must be moved, off and on (unless the bunk or bed goes with the sufferer), at least fourteen times before resting in a general hospital. Often the number of movements is much more! Very few of the wounded thighs and knees now and recently brought to Washington have any supporting appliances."

MEDICAL FEES. The *American Medical Times* calls out for a revision of the Fee-list. Medical men are the most meagrely paid of any class of any community. They are supposed to be liberally educated, and yet they are called upon to perform the most menial services. They have no repose either night or day. They are the common drudges to do all the hard labour, and that gratuitously, of every charitable institution. They expose themselves freely to every form of contagion, and meet death on every hand. And yet the reward for all this toil and self-sacrifice is little more than an "approving conscience." The truth is, medical men have never properly estimated the importance of their services, and have consequently placed a degrading pecuniary value upon them.



## OPERATION DAYS AT THE HOSPITALS.

|              |  |
|--------------|--|
| MONDAY.....  | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| TUESDAY....  | Guy's, 1 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.   |
| WEDNESDAY..  | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.   |
| THURSDAY.... | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.   |
| FRIDAY.....  | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY.... | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

## DISEASE IN MANCHESTER AND PRESTON.

RETURN of diseases occurring in public practice in the week ending August 13th, 1864. Manchester, contributed by Manchester and Salford Sanitary Association; Preston, by R. C. Brown, Esq.

|   | Manchester. | Preston. |
|---|-------------|----------|
| Small-Pox .....                             | 3           | —        |
| Chicken-Pox .....                           | 1           | 2        |
| Measles .....                               | 12          | —        |
| Scarlatina .....                            | 19          | 6        |
| Diphtheria .....                            | 1           | —        |
| Whooping-Cough .....                        | 1           | —        |
| Croup .....                                 | 1           | —        |
| Diarrhoea and Dysentery .....               | 160         | 38       |
| Continued Fever .....                       | 47          | 17       |
| Erysipelas .....                            | 6           | 3        |
| Rheumatism .....                            | 57          | 5        |
| Neuralgic Affections .....                  | 11          | 2        |
| Constitutional Syphilis .....               | 26          | 2        |
| Phthisis .....                              | 52          | 6        |
| Insanity .....                              | 13          | 2        |
| Bronchitis, Inflammation, and Catarrh ..... | 121         | 16       |
| Pleurisy and Pneumonia .....                | 15          | 1        |
| Skin Diseases .....                         | 67          | 3        |
| Dyspepsia .....                             | 80          | 12       |
| Other diseases not classed .....            | 714         | 70       |
| Totals .....                                | 1416        | 189      |

## TO CORRESPONDENTS.

\*• All letters and communications for the JOURNAL to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ERRATUM.—In Mr. Paget's paper published in last number, at page 213, column II, line 10, for "pubes," read "unibilicus."

THE governors of the Samaritan Free Hospital have decided that operations for diseases incidental to women may be performed either by the physicians or the surgeons of the hospital. This seems to us a very natural resolution. Physician-accoucheurs have taken upon themselves the right of operating, and (as far as we can understand the rights and wrongs of a matter) they have a perfect right to do so. Practice, we suppose, makes etiquette; and there is no etiquette which forbids the accoucheur to perform an operation. If a physician choose to operate, most assuredly the College of Physicians would never contest his right to do so. It would be hard, indeed, if any college attempted to interfere in such a way with its members, so long as there is nothing to prevent any man in the country, from the Archbishop of Canterbury (who confers degrees in medicine) down to the crossing-sweeper, from performing operations or treating diseases. Etiquette has decided that pure physicians must not amputate legs; but it has not decided that physician-accoucheurs shall not operate on female diseases; and therefore physician-accoucheurs do operate in such diseases; and we really see no reason why they should not, if they are pleased to do so.

M. S.—You need be in no anxiety respecting the limitation of the Provident Fund to members under sixty. The Committee was quite right in taking the actuarial average; but the Chairman of the Directorate promised at Cambridge that the whole subject should be reconsidered by the directors, who will, we doubt not, find a means of meeting the difficulty, to the satisfaction of all associates.

STRUMOUS OPHTHALMIA.—SIR: Your number for August 6th, contains an appeal from a correspondent, "M.D.," who finds a difficulty in dealing with certain cases of so-called "strumous" ophthalmia, of a persistent and contagious character, in children who are workhouse residents. I beg to direct his attention to page 398 and context of the *British and Foreign Medical Review*, April 1863. He will probably, on minute inspection of his patients, find the affection not different from the granular ophthalmia of barracks; notices are to be found in the last Army Reports, and which is proved to exist in workhouses, in a somewhat recent number of Besle's *Archives*. This complaint is so little amenable to treatment, that it is likely to constitute a standing imperfection in our in-door workhouse system. I am, etc., G. G. Paddington, August 1864.

CERTIFICATES IN CASES OF MISCARRIAGE.—SIR: I am reported at a late inquest to have said, "It was a common practice for medical men to let the bodies of still-born children be buried in back gardens." I referred to miscarriages. Dr. Hanks said, "That the medical profession wished particularly to know if, in cases of miscarriage, certificates were required?" It seems that all medical men are not yet convinced of the absolute necessity of supplying certificates in cases of miscarriage and abortions; as some are still awaiting the unanimous decision of the members of the medical profession; many wishing "particularly to know if certificates are required in cases of miscarriage." They do not echo my remark: "That after that verdict, the medical profession would know what to do in cases of miscarriage." For, in spite of the "opinion of blame," fearless of its dire consequences, detraction from their reputation, and interruption to their success, some of my brethren propose resolutely to conform with the custom transmitted from their forefathers, positively refusing to certify to cases of abortions and miscarriage. They join with myself in boldly calling for a reply, careless of the indignation and protest of the insignificant few; satisfied that, by so doing, they are not casting a slur nor bringing dishonour on the profession. I am, etc., HENRY HANKS.

116, Mile End Road, August 1864.

GRATUITOUS MEDICAL SERVICES.—A correspondent writes: "You may perhaps remember that about four years ago, the Committee of the Nottingham Dispensary agreed to make some pecuniary acknowledgment of the services of the consulting medical officers. This act of liberality (which, I believe, was noticed and commended by the BRITISH MEDICAL JOURNAL) has been repeated every year up to the present time; but, unfortunately, some of the Committee have managed to get up a strong opposition to it; and in revising the rules a short time ago, left out any mention of payment. A special general meeting of the governors was called last Monday, and though the Committee were defeated on a question of form, yet there was a manifest indisposition on the part of the meeting to admit the propriety of paying the medical staff, and therefore I addressed a letter (enclosed) to one of our daily papers, setting forth the opinions which, in common with yourself, I hold on the subject of gratuitous medical labour; and I acknowledge myself under much obligation to you for your powerful advocacy of the same principles which I have endeavoured, but feebly, to espouse."

COMMUNICATIONS have been received from:—MR. GEORGE LAWSON; DR. MONCKTON; MR. GASKOIN; MR. RHODES; MR. C. HARRISON; MR. LAWSON; DR. G. H. PHILIPSON; MR. JONATHAN HUTCHINSON; MR. T. M. STONE; MR. T. P. FEALE; DR. THOMAS SKINNER; MR. T. PAGET; MR. W. M. BAKER; MR. S. W. FEARN; DR. H. J. ALFORD; MR. T. W. WILLIAMS; DR. MORRIS; DR. JAMES RUSSELL; DR. A. RANSOME; MR. THOMAS MALTIN; and DR. C. B. NANKIVELL.

## ADVERTISEMENTS.

## Resident Clinical Assistants.—

A VACANCY having occurred in the HOSPITAL for CONSUMPTION and Diseases of the Chest, those Gentlemen who are desirous of becoming Candidates for the vacant office are requested to send in their applications, with testimonials, on or before SATURDAY, the 3rd of September, and to attend the Medical Committee on the following Monday, at 1 o'clock. Testimonials as to moral character as well as to medical qualifications are required. Further particulars may be obtained at the Hospital.

PHILIP ROSE, Hon. Sec.  
Brompton, August 17th, 1864. HENRY DOBBIN, Sec.

## Everyone has marked the un-

pleasant dirty appearance of a GLASS EYE, which can always be detected by the disagreeable expression on the physiognomy. But it is now known that M. BOISSONNEAU, Senior, Oculist to the French Army and Hospitals, of No. 11 Rue de Valenciennes, Paris, has invented a little chief-d'œuvre in Enamel, which combines the attributes of lightness, solidity, and comfort, with the expressive motion of the visual organs. The injured eye required no previous operation; the new invention can be inserted without disturbing the patient; children even bear it without a murmur.

M. BOISSONNEAU will be in London, Symond's Hotel, Brook Street, Grosvenor Square, on the 15th and 16th of September.

Any person desirous of communicating with him by correspondence will be solicited to send the colour of the eye required, and a photograph of the face not coloured.

## For Varicose Veins and Weak-

NESS. Very superior SURGICAL ELASTIC STOCKINGS and KNEE-CAPS, on a New Principle, pervious, light in texture, and inexpensive, yielding an efficient and unvarying support, under any temperature, without the trouble of Lacing or Bandaging. Likewise, a strong low-priced article for Hospitals and the Working-classes.

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carat. Hall marked engraved with any Crest, 42s.; ditto, very massive, for Arms, Crest, and Motto, 43 15s. The Hall Mark is the only guarantee for pure gold.—T. Culleton, Seal Engraver, 25, Cranbourn Street, corner of St. Martin's Lane.

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quality, 1s. post free. Engraving a Copper Plate in any style, 1s.; Wedding Cards, 50 each for Lady and Gentleman, 50 Embossed Envelopes, with maiden name printed inside all complete, 13s. 6d. Catalogue paid. T. Culleton, 25, Cranbourn Street, corner of St. Martin's Lane.

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the ink spreading, and never washes out. Initials, 1s. each; Name, 2s. 6d.; Set of Numbers, 2s. 6d.; Crest, 3s., with directions, post free for stamps.—T. Culleton, 25, Cranbourn Street (corner of St. Martin's Lane).

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## Liquor Bismuthi, (Schacht),

Carefully purified from Arsenic and other Contaminations. A fluid preparation of Bismuth, not decomposed by dilution. This article has been extensively used at the Bristol General Hospital, and in private dispensing, since 1857; and is recommended by many of the faculty as more efficacious and more convenient of administration than any other form of the remedy.

Prepared by G. F. SCHACHT, Chemist, Clifton.

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TO PHYSICIANS, SURGEONS, AND DRUGGISTS.

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TISSUE, prepared from pure Cantharidine. An elegant preparation, vesicating in much less time than the Emp. Lyttae P. L., easily applied and removed, and will not produce stranguary or troublesome after-sores. It has received the sanction and commendation of many of the most eminent practitioners in the kingdom.—In tin cases, containing ten feet, 6s. 6d.; and small cases of five square feet, 3s. 6d. each.

## BROWN'S TISSUE DRESSING.

An elegant, economical, and cleanly substitute for all ointments as a dressing for Blisters, Burns, etc., and may be called a companion to the above. In tin cases, containing twelve square feet, 1s. 6d. each.

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TO SURGEONS, APOTHECARIES, AND DRUGGISTS.

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# Clinical Commentaries

ON

## CERTAIN RARE FORMS OF DISEASE CONNECTED WITH SYPHILIS.

*Delivered at the London Hospital.*

BY

JONATHAN HUTCHINSON, F.R.C.S.,

SURGEON TO THE HOSPITAL, AND LECTURER ON SURGERY AT THE  
MEDICAL SCHOOL.

GENTLEMEN,—I sometimes feel almost annoyed at being compelled so very frequently to prescribe iodide of potassium. We go from bed to bed, and to cases apparently of the most different kind, and for almost one in every three I am obliged to dictate the same prescription.\* Iodide of potassium in large doses, generally in combination with ammonia, and sometimes with the bichloride of mercury, seems to be the panacea for almost a majority of our cases of chronic disease. Here is a man with convergent squint and double vision: he has come up from Cornwall to be treated, and he looks perfectly healthy. We investigate his case, and pronounce the diagnosis of syphilitic paralysis of his right sixth nerve. A man, a few beds lower down, came in on account of a pain in his heel, which had resisted all treatment for months, and prevented him from either working in the day or sleeping at night. He, too, looked quite healthy; but, on probing his symptoms and history, I gave a syphilitic diagnosis, and, what is more, confirmed it by quickly curing him. A woman was admitted six weeks ago with numerous large ulcers on the legs, and some also on her arms. She had scars of former ulcers about her knees; and the multiplicity of the sores and the worm-eaten character of their edges confirmed the suspicion formed at first glance. She, like the former patient, had had much previous treatment without result, and got well most rapidly under our favourite prescription. There is a boy in Talbot Ward with ascites, and with a liver which reaches below his navel, and with hard periosteal nodes on almost every long bone in his body. His sister was also here not long ago, suffering from nodes; and his mother I have repeatedly had under care during the last fifteen years, for various forms of constitutional syphilis. We have also in the same ward two men suffering from chronic enlargement of the testis, which we attribute to the same almost ubiquitous taint. One of them is already nearly well; and the other, I have no doubt, will soon be so.

If we go down stairs to the women's ward, we shall find some most interesting cases. There is Mrs. G., the unfortunate wife of a very dissolute sea-captain. She came into the hospital in order to have her sight improved by an artificial pupil, in consequence of adhesions, etc. One of her eyes is shrunk,

soft, and collapsed; and she has, or rather had, the pupil of the other eye almost wholly closed by lymph. I have made her an artificial pupil, and she sees as much better as we could expect. You will notice that she speaks thickly; uses her limbs awkwardly; and, although not yet even middle-aged, looks as if she were entering on second childhood. Her history is that of a case of subacute syphilitic inflammation of the pia mater. She first came under my observation more than a year ago, at the Moorfields Hospital, for most acute double iritis, and covered with syphilitic rash. The pupils were already closed with lymph, and she was already salivated. We adopted the treatment which seemed best; but, as you see, only with very partial results as regards her eyesight. In her right eye, choroiditis and inflammation of the vitreous body afterwards set in; and the eye ultimately became soft, and then shrunken, as it now is. After this, she became exceedingly nervous, could not sleep at nights, and was at length laid up at home with delirium. She was now for some weeks under private care with a form of mania; all her limbs became weak and tremulous; and, when she recovered, those of her left side were weaker than the others. As syphilitic inflammation often attacks the choroid coat of the eye, there is no reason why it should not affect the vascular membrane of the brain; and to suppose that it did so in this instance would well account for all her symptoms.

In the same ward is a girl aged 15, whom we admitted a week ago with large, ragged-edged, very deep ulcers on the back of one leg. They are ulcers of a character which, if seen in an adult, you would at once pronounce to be those of tertiary syphilis. And, in confirmation of that view, she has an induration in front of one tibia. The girl is, however, only fifteen; and she has had these ulcers for several years. The disease in her is congenital; and she shows, in order to help us to this opinion, one of the most typical sets of teeth that I have ever seen. You will note that her physiognomy would not have led us to suspect her, for there is nothing very peculiar in it. The bridge of her nose is not flattened; her forehead is not protuberant; nor are there any scars of fissures about her mouth. Her teeth, however, tell the tale, and are so characteristically malformed that I should venture a positive opinion without other evidence. You will watch the effect of specific treatment upon her ulcers. I will ask you to observe that the ulcers are clearly not due to mere ordinary cachexia, for the girl looks healthy; and, should they be well under iodide of potassium in a few weeks, I shall then ask you to remember that they had existed for several years before she came here.

I have only mentioned about a third of the curious forms of constitutional syphilis at present under our care. You will observe that I omit all primary and secondary forms of disease. Those which we shall at present consider are such only as occur at long periods after the original disease, and come into the category of late tertiary affections. Our knowledge of this latter class has of late years very much improved, and we are now able to recognise many as such which formerly we did not know; and, I am glad to add, we are able to exclude some from suspicion which were formerly much suspected.

The feeling of reticence to which I alluded, as sometimes arising when one is obliged over and over again to prescribe the same specific, has its origin in

\* In mentioning this proportion, I of course allude only to our wards for chronic disease, and do not include those for accidents.

a doubt and a fear—a doubt of one's own accuracy of judgment; and, secondly, a fear of the criticisms of others. A sort of fear arises as to whether, after all, the suggestions now and then made, "Oh, he is riding his hobby—he sees syphilis in everything," may not have some foundation in truth. Now, this self-mistrust is very natural and very useful in its proper place, but let me warn you not to let it go too far; and, as regards the criticisms of others, let me beg you not to allow them to influence your judgment one iota. There is not the shadow of a doubt that the syphilitic virus is capable of producing effects at extremely remote periods, and after long intervals of apparently good health. There is not the least doubt, further, that this virus is very widely diffused amongst all classes of the community. We must, therefore, expect to encounter its results very frequently, and under very varied circumstances. Our duty in this matter is to find out with accuracy, amongst the great variety of chronic maladies which come before us, which are syphilitic and which are not. Upon our success in diagnosis will depend our success in treatment. There is no room for joking scepticism. It is a simple question of fact. My patient presents a form of disease which we know must have had some cause. We know, further, that the syphilitic taint is a cause quite capable, in some instances, of producing a similar result; and we want to find out by collateral evidence whether that cause is in operation here. And, if it should so turn out that we are obliged, after painstaking investigation, to believe in the presence and efficiency of that special cause in five out of every twenty patients, it cannot be helped. We want truth; and, if that is the truth, we must take it and act on it. A good means of checking our own conclusions is always at hand. I allude to the results of treatment. In most cases of tertiary syphilis, the consequence of acquired disease, the effects of specific treatment are most prompt and definite. Unfortunately, it is not so in a few, especially in those which concern the nervous system; and it is not so in many which are consequent on inherited taint. In these, the efficacy of specific treatment is often but ill marked.

Before proceeding to relate cases in detail, there are three or four doctrines regarding syphilis which have of late years fought their way to general belief, to which I must ask your especial attention.

The first of these is, that tertiary syphilis may, and often does, last through a person's life. By tertiary syphilis we mean all forms of specific disease occurring subsequently to the primary and exanthematic stages; practically, everything that comes later than two years after the infecting sore. The exanthematic stage usually occurs within two months of the original sore, and is rarely protracted beyond the year. We will, however, to give good margin, say two years. After this, the disease appears to have no stages; periods of entire latency, of the most variable lengths, may occur. The symptoms which show themselves are irregular, and subject to repeated relapses after cure by treatment. Between the secondary and tertiary symptoms, an interval of health, often of several years, and it may be of many, supervenes.

The second cardinal doctrine, as regards tertiary disease, is what I have just adverted to: that it may be *latent*. By latent, I mean that it may be entirely

concealed. The patient may appear to be in robust health; may not show the slightest trace of a symptom; may even marry and beget healthy children; and yet the disease may reappear. In a recent lecture, I brought forward a case in which the period of latency had been twenty years; and I shall have to mention several others, in which it has been nearly as long. The phenomena of latency are even more wonderful in respect to inherited than they are in regard to acquired disease.

Thirdly, I wish to insist that it is very common for married women to acquire a constitutional taint, without having ever had primary or secondary disease, and, therefore, without either themselves or their husbands having the slightest suspicion as to what has happened. This occurs in women who have borne children to syphilitic husbands, and who have imbibed from the fluids of the fœtus the poisonous material. We will call this "Syphilis by conception".

Lastly, we must remark, that it is very possible for a patient to have primary syphilis, and never be aware of it. In a woman, this may easily be. A small indurated chancre causes very little irritation, and is perhaps never suspected to be of any consequence. It so happens, that the sore most likely to infect gives the least local annoyance; and many an inexperienced man will allow a sore of this kind to go on without treatment, and afterwards, in good faith, assure his surgeon that he has "never had a chancre". But there are cases even yet more difficult to explain, in which even a practised eye never finds the infecting sore. I have more than once or twice known it to happen, that surgeons or medical students, who came under treatment for secondary forms of disease, and who made not the slightest attempt at secrecy, assured me that they had never been aware that they had primary sores.

The chief lesson to be drawn from these various sources of fallacy in the histories we receive is, that the surgeon must learn, by widely extended practice, to trust to his own eyes for a diagnosis. The importance of being independent of what our patients may tell us can scarcely be exaggerated in this matter. Not only will it save us from being misled by erroneous statements, but it will in some cases save the necessity for asking annoying and painful questions.

We will now proceed with some clinical illustrations of our remarks.

*Latent Syphilis. An Interval of Eight Years without Symptoms, the Patient enjoying Robust Health. Ulcerative Destruction of the Palate, with Psoriasis of the Backs of the Hands.* Wendon Dawson, aged 30, a dark complexioned man, looking much older.

Nine years ago, he had a sore. He was then in the navy; went into Chatham Hospital; "took mercury pills, and was salivated freely." He had a lube in one groin, which suppurated and remained open for two months. He left the hospital after six weeks, and took no more medicine. He recollects that he had a sore-throat; but does not remember any rash.

On leaving the hospital, he went on board ship again; and had good health and remained quite well. Three years later, he married. His wife has never conceived, and has remained in perfect health. Very soon after he married, he had "yellow jaundice," and was very ill for a week or more; he was at home a month.

About a year ago, his throat began to be sore; and



six months after this, sore patches shewed themselves on the backs of his hands. He has only been under treatment for these affections for about two months. During the interval since his discharge from the Chatham Hospital, with the exception of the attack of jaundice, he has enjoyed good health; and has been wholly free from symptoms; "never lost a single day's work." We questioned him most closely, and could not make out that he had had any suspicious symptoms whatever.

January 13th, 1864. The subject of the above notes was sent to me by Mr. Swales of Sheerness. He is now cachectic, and speaks in a hoarse whisper. His soft palate is extensively destroyed by ulceration, which is still spreading; his breath has the fœtor of diseased bone. The backs of his hands and wrists are covered by patches of psoriasis, with fissures and peeling of epidermis, just like the common psoriasis palmaris. There is not a single patch in either palm. There are two or three similar patches on each cheek.

The man states that he has never had any venereal disease since the one described nine years ago, and there is not the least reason to doubt his statement. Let us note, also, that, although salivated in the first instance, he has never needed any medicine since, except during the last few months.

Under about two months' treatment, this patient got quite well as regards his throat; and his psoriasis, although not cured, was much benefited.

In the next case, we have again phagedæna of the throat; but its chief interest attaches to the fact that the man has entirely lost his hearing. With regard to the throat. I may, however, here ask your attention to the difference between the secondary and tertiary forms of disease as they occur in it. In the secondary stage, the inflammation is always superficial, and always ends in cicatrization, without noticeable loss. Indeed, excepting in the tonsil itself, there is rarely any ulceration. On the velum palati and pharynx, it is rather inflammatory swelling than ulceration. All the deeply ulcerative or phagedænic affections of the throat occur years after the primary disease, and are tertiary. Of this, both the cases before us are examples.

*Case of Syphilitic Cerebral Deafness.* We have, in a man now in Talbot Ward, an interesting example of deafness in connection with constitutional syphilis. The man is utterly deaf, so that we have to communicate with him by writing. He was admitted a few weeks ago for syphilitic ulceration of the soft palate, which, under the influence of iodide of potassium, is rapidly getting well.

His history is briefly this. He had chancres six years ago, and again three years ago; on the latter occasion, with suppurated buboes. He has been salivated for various symptoms two or three times. About twenty months ago, his hearing began to fail, and he had singing noises in his ears. There was no pain in his ears, nor any discharge from them. He had, however, a good deal of pain in his head. In the course of a month from the beginning, he tells us, that he had got as deaf as he is now. Mark the very rapid progress of the affection. Both ears were involved from the beginning; but one more than the other; indeed, he still pretends to be able to hear a little in one, though which it is might puzzle you to find out. He had no sore-throat at the time. He was salivated on account of the deafness; but it did him no good. Nearly a year later, he had a severe illness, of which some of the chief symptoms were giddiness and great pain in his head. He had, also, swellings

in his scalp. Double vision, with dilatation of the pupil of the right eye, followed (paresis of right third nerve). For this he was again salivated, and his eye, or rather his third nerve, quite recovered. Lastly, about three months ago, he was attacked with syphilitic phagedæna of the velum palati, for the remains of which he now comes under our care. You may observe that the velum is very extensively destroyed; but it is now rapidly healing. In other respects, he seems tolerably well; but his complexion is pale and earthy.

It is a point of great interest and importance to determine, if we can, upon what his deafness depends. Although diseases of the eye, leading to greater or less of damage to the function of sight, are common enough in syphilis, yet with the ear it is quite different. Cases like the present are, I believe, exceedingly rare. Now, in respect to the organ of sight, we have syphilitic disease of very different parts. Inflammation of the iris is the most common; next to it come inflammations of the choroid and retina; and, lastly, disease either of the optic nerves themselves, or of the centres from which they arise in the brain. The former may greatly damage the function, but they rarely quite destroy it; the latter not unfrequently lead to complete blindness. The fact that the poor fellow before us is almost absolutely deaf, is sufficient, therefore, in itself, to excite a suspicion that his disease involves either the nerve-trunks or the nerve-centres. If it depended upon disease of the tympanum or external ear, or even of the internal ear itself, it is improbable that it would be complete on both sides. The speculum, also, gives us great help; for it shows us that, in each of our patient's ears, the membrana tympani is not in the least damaged. The external ear is, on each side, remarkably clean; not a vestige of wax or of epidermic accumulation obstructs our view, and the dry bluish-white membrana tympani, with the handle of the malleus attached, can be inspected without the slightest difficulty. His history quite fits with this state of things; for he never had either pain or discharge from the ears. It is possible that there might be some obstruction of the Eustachian tubes; but this is improbable, since it would not explain utter and symmetrical deafness; and we have the fact, that his throat did not begin to be sore till long after the loss of hearing.

Thus, then, we are brought, by the method of exclusion, to our original conjecture, that the nerve of hearing must be the part damaged. Now, it is possible that the auditory nerve might be pressed upon by effusion from the periosteum in the auditory canal; but this hypothesis, in the present instance, I reject, for two reasons: first, that the disorder is so symmetrical; and, secondly, that if the portio mollis were so compressed, the portio dura would, in all probability, suffer likewise; whereas, as you see, it has wholly escaped. My belief is, therefore, that the real cause of the lesion is syphilitic disease of those portions of the brain, medulla oblongata, and cerebellum, from which the auditory nerve arises. It is probably analogous to amaurosis, with white atrophy of the optic nerves, consequent on changes in the corpora quadrigemina. You will note that other symptoms from which the man has suffered favour this opinion. He has had a prolonged illness, attended by giddiness; and he has suffered much from pain in his head and noises in his ears. He has even had

paralysis of a special nerve (right third), from which he has recovered.

Now, although syphilitic deafness from cerebral disease is very rare in the acquired form of the disease, it is far from being so in that which is inherited. In my little work on *Syphilitic Diseases of the Eye and Ear*, I have described a form of deafness almost the exact counterpart of that from which our present patient has suffered; and ending, as in him, after a short course, in utter extinction of the special sense. Of this I have adduced numerous instances; but all were in the subjects of inherited syphilis. I had not then seen a single well-marked example in acquired syphilis. A similar remark may be made in reference to cerebral amaurosis, which we not very unfrequently meet with in the subjects of inherited disease, but only rarely in those who have acquired the taint *de novo*.

It may, perhaps, not be without its interest, if I read to you the notes of the last case I have seen of syphilitic cerebral amaurosis. It was one of the best marked that I have ever had an opportunity of investigating. You will notice some points of close analogy between what we may designate syphilitic cerebral deafness and syphilitic cerebral blindness. In both the progress is rapid and usually symmetrical, and in both the extinction of function is mostly complete. In both, a few other slight cerebral symptoms are usually present, such as ringing in the ears, giddiness, etc.; and in both, there is a remarkable absence of any symptoms referable to the external organ of the special sense. Let me add, that both are most intractable under treatment. You will notice that each of our patients had been salivated, the one for impending blindness due to inherited syphilis, the other for impending deafness due to acquired syphilis; and in neither did this measure retard the course of the disease. I have witnessed a similar failure in many other cases; cases, too, in which there was no doubt whatever as to the diagnosis. Iodide of potassium, in these affections, is a far more reliable remedy than is mercury.

**PROFESSIONAL INDISSCRETION.** Owing to the appearance of a most injudicious and ill-advised paragraph in the *Kentish Gazette*, an inquest was held on the body of Thomas Bedwell, a labourer, living at St. Dunstan's, who died somewhat suddenly, while under the care of Mr. Rigden. It appears that the poor man was subject to epileptic fits, for which Mr. Rigden treated him. He had seen the man on Sunday morning, and sent him some medicine. In the afternoon he became worse; and, Mr. Rigden being away from home, Mr. A. B. Andrews was called in. From some utterly inexplicable cause, this gentleman thought fit to hand over the medicine supplied by Mr. Rigden to the care of the police; and hence arose a rumour to which our cotemporary, with a most reprehensible want of caution, gave circulation that Mr. Rigden had administered to the patient opium in such a manner as to cause his death. At an inquest held to clear up the affair, it was shown that the rumours were completely groundless. Mr. Andrews himself stated at the inquest that the deceased had "had three epileptic fits in his presence, which fits were the cause of his death." The coroner said, that but for the paragraph in the newspaper no inquest would have been necessary. The evidence was very plain, and Mr. Rigden was entirely clear of all blame. (*Kent Papers*.)

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### ST. MARY'S HOSPITAL.

CLINICAL REPORTS ON THE PAPULAR DISEASES OF THE SKIN.

By GEORGE NAYLER, F.R.C.S., Assistant-Surgeon to the Royal Orthopædic Hospital; Pathological Curator of the Museum of St. Mary's Medical School.

[Continued from page 583 of last volume.]

**LICHEN PILARIS**, so called from its involving the hairs which pierce the papules in their centre, is a rare variety. The hair-follicle becomes filled with epithelium and its debris; and a number of small acuminate papule are observed in place of the papillæ, having each on its apex a single hair. It is chiefly developed on those parts which are covered with soft fine hair, as the neck or chest. I had the opportunity of seeing, some months ago, a remarkable instance of this kind among the out-patients in Mr. Startin's practice, in a boy, where the disease was mostly seen on the back of the neck, and appeared not unlike the small rough eminences on the surface of an echinus. In this case, the loins and shoulders were also covered with lichen in its ordinary form.

**Lichen lividus**, like the preceding, is also uncommon. Mr. Startin has noticed its occurrence about once in 1800 cases; and Rayer relates having only seen it twice. It is almost always united with broken-down or feeble health, and is generally seated on the extremities. The spots are of a purple colour, intermingled with petechiæ.

J. G. (No. 99,449), aged 52 years, applied for relief, on October 13th, 1862, at the Skin Hospital, with the eruption chiefly seen on the inner side of the legs. It was like a number of purple dots, each of an average diameter of a pea; some were distinct, others more or less fused. To the hand, the surface appeared slightly raised. He was in delicate health, and complained of the least exertion being attended with fatigue. When in bed, the spots assumed a brighter colour, and occasioned some degree of irritation. For several years, he had been subject to rheumatism. He was ordered to take a mixture of steel with colchicum twice a day, and to sponge the parts with a mixture of nitric acid lotion and red lotion (two ounces of each, with eight ounces of water). (The first of these contains half a drachm of dilute nitric acid to an ounce of water; and the second, two grains of the bichloride and one of the bisulphuret of mercury to an ounce of water.) He rapidly improved under this treatment; and on the 1st of November he was nearly well. Anxious to know how he was getting on, I heard from him some months afterwards, when he informed me that he since had another slight attack, from getting wet through. He then took the same remedies, and soon recovered.

**Lichen circumscriptus** is the name given to the disease when it forms a circumscribed patch, having a defined border, or is represented by several small patches. It is not unfrequent on the hands, or the popliteal space, or the nape of the neck. Its colour is of a dark red. In some instances, it is prolonged



for years by the outbreak of fresh patches, which, like those of lepra, enlarge at the expense of their circumference, and decline at their centre. As an example of its truly chronic nature, I may quote the case of C. B., a tailor, aged 60, in whom the disease had existed as a patch on the back of neck, and of the size of the palm of the hand, for twelve years. The papules were large, closely aggregated, and in colour of a purplish red. It caused much irritation, if he became heated. On April 3rd, 1862, he was ordered to take the tenth of a grain of bichloride of mercury, and the fortieth of a grain of arsenious acid twice a day; and to apply at night an ointment containing six minims of creasote, half a drachm of mercurial ointment, ten grains of levigated nitric oxide of mercury, and an ounce of cerate. April 17th. He was much better; only a few spots were left, and those of a lighter colour. May 22nd. He was nearly cured. June 22nd. He returned a letter of thanks to the hospital.

Syphilitic lichen is of frequent occurrence. The disease is recognised by the coppery colour of the papules; the small amount of pain by which it is commonly attended; its tendency to become tubercular; and, lastly, by its seat, which, in addition to other parts, will generally appear on the forehead, and not seldom on the soles of the feet. The tongue also is sometimes fissured; and what may commonly be seen, characteristic of syphilitic lichen, are a number of small superficial pits or cicatrices, in most cases on the face only, the result of ulcerations following the eruption, and not unlike those produced by variola. Syphilitic lichen, like other skin affections of this class, has no special characters; and the eruptions that succeed to, or are dependent upon, syphilis, as Dr. Jenner has observed, always deviate from the original disease in its true type, whatever it may be.

*Treatment.* The treatment of simple lichen may be summed up in a few words. The same will also apply to tropical or any less severe kind of lichen. It consists in proper attention to the bowels, and in the avoidance of any exciting cause. In early life, it is too often the practice of the mother to cram the child with milk or indigestible food, or to overload it with clothes. Flannel will sometimes irritate the skin, and so even will soap; or the child may be insufficiently dried after washing. I need not enter into further detail, or suggest the obvious mode of dealing with these cases. As far as the medical treatment is concerned, it will be enough to administer a few grains of rhubarb and soda in the first instance, followed afterwards by a light tonic. When lichen occurs in the acute stage, the use of purgatives should not be neglected; as the *mistura magnesia cum colchico* of the *Pharmacopæia*, to which antimony may be added; and, as an external application, either goulard lotion, or one holding in weak solution creasote and the bichloride of mercury, one grain of the latter to an ounce of water. The *lotio carbonis* is also of considerable benefit in these cases. After the irritation has subsided, or in chronic lichen, as lichen agrius, small doses of mercury should be given; and, indeed, in the greater number of papular complaints, this mineral will generally be required, the amount not exceeding one-sixth of a grain of the biniodide, or the eighth of that of the bichloride. Before going to bed, some mercurial ointment should be rubbed into the affected surface. That in use at the hospital is the *unguentum rubrum*, or the compound mercurial ointment. In the lichen urticatus of children, the same means may be adopted, regard being had to the age. Thus, to a patient of three years old, the carbon lotion should be diluted with an equal amount of water, and the mercury diminished by two-thirds for

a dose. Where the eruption is confined to a few spots, or takes place in a weakly subject, quinine or iron may be prescribed with advantage; the local treatment remaining the same. The tincture of aconite, in certain cases, is highly spoken of by Nelligan; and, as a local measure, the same author recommends conium, given thus: one drachm of *succus conii*, half a drachm of glycerine, and five grains of soda, to an ounce of water. Baths are highly serviceable in the papular eruptions; they lessen the irritability so frequent in this class of diseases. The patient should, however, be warned not to take one of too high a temperature; indeed, in all cases a tepid bath is to be preferred at the commencement; and, as he becomes accustomed to its use, he may remain in it for a longer period. If the irritation be very great, and in the later stages of the disease, where the skin is still rough and dry, a starch or gelatinous bath will be attended with considerable comfort. An alkaline bath is occasionally beneficial; and, in confirmed cases, the sulphur springs of St. Sauveur, Louesche, or Aix-la-Chapelle, may be tried.

I have now to draw attention to the two varieties of lichen specially mentioned by Hebra, and described by him with much precision and minuteness. The first, or lichen scrofulosus, is a constant companion of caries, lupus, and tuberculosis. It is characterised by pimples of the size of ordinary lichen, and of the same colour as the epidermis, or pale yellow, or brownish red. Some degree of desquamation is often met with in this variety, which, as it is unaccompanied by pruritus, does not, therefore, show those little scabs of dry blood produced by excoriation. The papules, in short, remain unaltered. Unlike any other species of lichen, this variety is mostly seen on the trunk, abdomen, breast, and loins, and seldom on the extremities. In progress, it is very slow, and generally remains unheeded by the patient until the disease reaches the limbs or the face, or unless other symptoms occur in the papules, as their attaining the size of a lentil, and assuming a bluish red colour; or containing, like acne, a small quantity of pus; or drying up, leaving a circular dark stain. The skin between the papules is generally scurfy, or covered with incipient scabs like bran, and dull-looking.

The disease is always connected with enlargement of the lymphatic glands. Hebra further states it to be peculiar to the male sex. Not one instance does he record of its affecting the female; nor, in so far as his observations extend, is the complaint influenced by season or occupation.

Still more remarkable in its symptoms, progress, and termination, is lichen ruber, noticed, I believe, by Hebra alone, and distinguished by the dark red colour of its papules, whence the name. Observing throughout their course the usual size, the papules are at first scattered or separated, and covered with small thin scales, which cause slight itching, but not such as to lead to excoriation or scabbing. The intervals left unoccupied by the former pimples are soon dotted with a new group; and, as these become more thickly sown, large red plots are seen covered, as I have just said, with numerous fine scales. The movements of the muscles become considerably impeded; those in particular of the hands and feet. The fingers are kept in a semiflexed position, and present painful cracks. The nails of these, as well as of the toes, also suffer. They are thickened, do not reach their usual length, and are apt to break. In colour, they approach a yellowish brown. The course of lichen ruber is from bad to worse in the greater number of instances. As the disease advances, which it generally does, the patient becomes emaciated, and at length falls into a state of marasmus, and sinks.

Fourteen cases form the entire number mentioned by Hebra, of which one occurred in a woman; and in one instance only was the disease arrested in its course. In the treatment of scrofulous lichen, which appears between the ages of fifteen and twenty-five years, cod-liver has proved an excellent agent, and the only one in Hebra's hands. It is given, however, in half-ounce doses twice a day, a less quantity proving of no benefit. He also advises its external application, and directs the patient in the meantime to wear flannel or woollen clothes. For the relief of the other, or red lichen, Hebra places the most reliance on arsenic. The reader is referred, for further information, to Hebra's article in Virchow's *Handbuch der Speciellen Pathologie und Therapie*, Bd. iii, Lief 2.

[To be continued.]

## Original Communications.

### PRACTICAL REMARKS ON THE TREATMENT OF CONGENITAL CATARACT.

By GEORGE LAWSON, Esq., Assistant-Surgeon to the Royal London Ophthalmic and the Middlesex Hospitals.

[Concluded from page 33.]

As a rule, no urgent symptoms follow the first stage of the operation of linear extraction. Frequently, some little irritation exists for a few days; but oftentimes the eye continues so quiet, that one can hardly imagine that any operation has been performed. Still, on the other hand, grave symptoms occasionally arise, and require to be actively dealt with; for an eye with a congenital cataract is usually below the standard of strength, and succumbs quickly to sharp inflammatory action.

Supposing the operation to have been well conducted, and the case apparently a good one, the great cause of untoward symptoms arising, is pressure of the swollen lens itself, or of some of its particles on the posterior surface of the iris. Large pieces of lens matter may float freely in the anterior chamber—may even apparently almost fill it—and fragments may lie on the anterior surface of the iris, without producing any unpleasant symptoms, but the pressure of a portion on the posterior surface may act as such an irritant, as to kindle an amount of inflammatory action sufficient to destroy the eye.

To avoid, as far as possible, the chance of such a contingency, the pupil should be kept widely dilated with atropine, so that the particles of lens matter as they swell and detach themselves from within the capsule, may float through the widely dilated pupil into the anterior chamber. Sometimes, although the capsule has been freely broken on its anterior surface, yet the matter within has not been sufficiently comminuted, so that the lens, swollen by the action of the aqueous on its substance, and unable to discharge itself by fragments into the anterior chamber, presses by its entire surface on the posterior or uveal surface of the iris, and so becomes the source of great irritation. The reverse of this may, however, take place. The lenticular matter may have been freely broken up, but the aperture in the lens capsule may not have been made sufficiently large to allow of the ready escape of the particles after they have become swollen from the action of the aqueous on them, and so the enlarged lens presses on the back of the iris.

The symptoms which would be present would be those of great irritation; severe neuralgia over the

brow, around the orbit and in the eye itself, with a considerable amount of photophobia; the eye more red than normal, and the ciliary zone manifest; the aqueous muddy, and the pupil at first sluggish, then quite inactive and incapable of being dilated with atropine. Such symptoms as these call for immediate treatment. If they commence a few hours after the operation, or on the following day, it will be well to apply one or two leeches to the temple, and repeat one night and morning for two or three times. This local abstraction of blood often affords a most speedy relief, and at once arrests all excessive action. Act freely on the bowels with some moderate purgative, and keep the eye cool with a piece of linen moistened with cold water applied over it, and let the room in which the patient resides be darkened.

If no abatement follows the treatment, and the symptoms of irritation continue, the cause is very probably the swollen lens pressing on the iris, and it is advisable to get rid of this source of irritation by removing it, or as much of it as possible, and at once to perform the second part of the operation of linear extraction.

The second stage of linear extraction consists in removing the broken-down lens through a small linear opening in the cornea. Before it is attempted, if all has gone well, and nothing has happened since the first operation to necessitate its immediate performance, sufficient time should be allowed to elapse to allow all the transparent portion of the lens to become opaque and somewhat macerated by the aqueous. From three to six days will be about the time required for the desired changes to take place, but much depends on the condition of the cataract at the time of the operation, and upon the extent to which the capsule has been torn and the lenticular matter broken up. This stage of the operation requires great caution.

1. As to the part at which the broad needle should be introduced, and the mode in which the opening should be made in the cornea.

2. In allowing the lens, which is now diffuent, to run off on a curette, taking care not to bruise or in any way to injure the iris, or the posterior layer of the lens capsule.

The patient lying on his back with the face to the light, the eye is to be kept open with a spring speculum, and steadied by being held by the operator with a pair of forceps. The broad needle is used in his right hand for the right eye, and in his left hand for the left eye, to make the linear opening in the cornea. The outer portion of the cornea is the most convenient, and the part usually selected in each eye for this operation.

1. With reference to the opening to be made in the cornea. The pupil being widely dilated with atropine, the needle should be made to perforate the cornea at the point just external to where the pupillary margin of the iris is seen, and instead of penetrating it directly from before backwards it should be made, as Mr. Bowman has suggested, to pass obliquely inwards through the laminae of the cornea, and then by a slight cutting motion in its withdrawal, to enlarge the opening to its necessary length. The aperture thus made will be valve shaped, the external opening in the cornea being nearer to the circumferential margin than the internal, the object being, that the curette in and after its introduction, shall not press at all upon the iris, but in making the many movements which are required, shall rest solely on the inner lip of the valve-shaped orifice in the cornea. Frequently before withdrawing the broad needle it may be well to dip it towards the lens, and break up more completely any large fragments which may remain. Another advantage in thus making the opening well within the margin of the cornea is, that



prolapse of the iris does not occur, whereas when the linear incision is made close to the corneal margin, a protrusion of the iris is very apt to follow the aqueous with the soft lens as it runs off on the curette. A sufficient opening having been made, the curette is next to be introduced, and this should be done with a gentle lateral motion. The eye being still held by the surgeon with a pair of forceps, in the most convenient position, the curette is moved gently from side to side, pressing slightly on the mouth of the wound to permit the aqueous with the softened lens to flow down its groove. When the largest portion of the lenticular matter has escaped, here and there small opaque pieces will occasionally be seen which have not flowed away in the stream; these may be followed with the curette, and on the point of it being dipped as it were beneath them, they will also escape along its groove.

When the pupillary space is clear, it is advisable not to be too eager to catch every little opaque patch of soft matter, as oftentimes some little fragments will lie in front of the iris, difficult to get at, and more harm may be done by seeking for them than their presence can produce. All the movements of the curette should be conducted with the utmost caution, as it is highly essential that the posterior capsule should not be broken, for should such an accident occur, the vitreous will immediately come forward, as the hyaloid must be ruptured at the same time. One of the great troubles occasioned by the flowing forward of the vitreous is, that mixing with the opaque portions of the lens, which have evaded the curette, it becomes often next to impossible to remove them, as coated with the tenacious vitreous, they elude the point of the curette, and instead of falling into its groove and escaping by it, they are pushed about the anterior chamber in front of it.

The lens having been removed, or as much of it as will readily flow away, the patient is to be sent to bed in a darkened room, and the pupil is to be kept under the influence of atropine. This is generally necessary, as it is very common to leave behind some soft matter, which not having been acted on by the aqueous, remained transparent at the time of the operation, and so escaped the notice of the operator. If towards evening there is pain, one or two leeches should be applied to the temple, which may be repeated if it continues. The frequent small abstraction of blood has a most beneficial effect in arresting any untoward symptoms which may present themselves at this early period after the operation. The pain in the eye increasing, will call for warm and soothing applications, and of these the belladonna fomentation will afford the most comfort. If the eye should become hard, its tension increased, a simple puncture of the cornea with a fine needle, and allowing the aqueous to escape will give great ease. This operation is very simple, and may be repeated several times if necessary.

Iritis is the affection most to be dreaded after this operation. Its presence is suspected by a continuance of pain in and around the eye, but an examination of the eye itself will at once confirm or refute the suspicion. The serous aqueous, the muddy iris, and the ciliary zone of vessels around the cornea, give evidence of internal inflammation. With this form of iritis, there is always intolerance of light and considerable lachrymation. There is an acute and a chronic form of iritis which occasionally follows the operation of linear extraction. The acute may run its course in a few days and destroy the eye, or it may gradually subside to a certain point, and then become chronic. The chronic form commences from one to three weeks after the operation, and is the cause of great trouble to both the surgeon and patient. It is

always accompanied with photophobia and lachrymation, and the edges of the lids often become puffy, thickened, and excoriated. The aqueous continues serous, and the striation of the iris indistinct. The pupil is but slightly and irregularly acted on by atropine, and there is a slow dull pain in the eye. This chronic condition will last frequently many weeks. It yields but slowly to treatment. Counterirritants behind the ear repeated from time to time sometimes do good; but as a rule, all applications to the eye should be soothing, and the treatment tonic. Belladonna in one form or another should be applied to the eye to relieve pain and keep the pupil dilated, and occasionally a moderate mercurial inunction may be necessary.

*Extraction of the Lens by Suction.* This mode of treating congenital cataract has been lately reintroduced into practice, and the success which has attended it, makes it probable that it will be largely adopted. In the last number of the *Moorfields Ophthalmic Hospital Reports*, Mr. Fridgin Teale of Leeds has given an account of several cases which he has operated on successfully with a suction curette designed by himself. In his instrument, the suction power is applied by the mouth through the medium of a flexible tube attached to a tubular curette fixed in a handle. The hand which holds the curette is able to act independently of the suction, and is quite free and unfettered in its movements.

Mr. Bowman has tried this mode of treatment in many cases with very favourable results, and has used an ingenious syringe made at his suggestion by Messrs. Weiss. The suction power is obtained through a delicate metal syringe placed at one extremity of a glass tube, which is furnished at the other end with a tubular curette. The syringe is so contrived that its piston can be worked by the hand which both holds the instrument and guides its movements within the eye, leaving the other hand free to steady the eye with forceps.

Mr. Bader of Guy's Hospital has also had a suction tube made by Khron of Whitechapel. The suction power is a small hollow India-rubber ball, placed at the extremity of a tube which terminates in a glass tubular curette. Pressure is made on the ball with the hand, to expel the air from the tube, and its readmission is regulated by a well contrived stop apparatus placed close to the curette. After the air from the ball has been expelled and its readmission prevented by closing the stop, the curette is introduced into the eye, and the amount of suction is regulated by a little trigger connected with the stop apparatus within.

The extraction of the lens by suction may be performed in one operation, but my own feeling is, that it is better at the first operation to thoroughly open the anterior capsule of the lens, and break up the lenticular matter, and allow it to be well acted on by the aqueous before using suction to extract it. Should the lens be very soft and the cataract complete, one operation will suffice. The pupil having been first fully dilated with atropine, a fine needle is introduced through the cornea and the capsule freely torn, and the lenticular matter broken up. A larger opening is then made in the cornea with a broad needle, immediately within or on a level with the pupillary margin of the dilated pupil, sufficient in size to allow of the easy entrance of the tubular curette of the instrument to be employed for suction. A delicate manipulation of the instrument is required to move it from point to point, so as to place the open mouth of the curette in the most favourable position for sucking in the lens matter. The suction power must be carefully regulated by the operator, who is able to arrest it instantly when required.

If, however, the cataract is not complete, but a considerable portion of the lens is transparent, then I believe it is advisable to divide the operation into two stages, and first to perform the preliminary part of the operation for linear extraction, tear up the anterior capsule of the lens, and comminute the lenticular matter within, so that it may be exposed to the action of the aqueous. Two, three, or four days having elapsed, the suction part of the operation may be performed, and the whole lens, now opaque and diffuent, will be readily drawn through the tubular curette of the instrument. The attempt to remove a lens which is not completely opaque, is met by two difficulties.

1. The transparent circumferential portion of the lens is always sticky and adheres to the inner surface of the capsule, and it is difficult, if not impossible, to remove the whole of it.

2. From a portion of the lens being transparent it is impossible to say when the whole of it has been removed, as the opaque portion only is visible to the operator. By first allowing the aqueous humour to act on the lens matter, the transparent portion becomes opaque, loses its tenacity, and is readily sucked up into the tube.

5, Harley Street, Cavendish Square.

## Transactions of Branches.

### SOUTH WESTERN BRANCH.

#### PRESIDENT'S ADDRESS.

By C. B. NANKIVELL, M.D., Torquay.

[Delivered July 20th, 1864.]

GENTLEMEN,—The position in which you have done me the honour to place me, forcibly impresses me with the truth of the ancient allegory—that “Pleasure and Pain are twin sisters.” The pleasure of receiving the members of the Branch Association here to-day, is strongly mingled with the fear that I shall utterly fail in my efforts to render their visit either useful or agreeable; and this would certainly have been the case, had not medical friends in this place come forward with the greatest readiness and cordiality to aid my endeavours. I am sure that in their names, as well as in my own, I may offer you a hearty welcome to Torquay.

It so happens that I was one of those who, in 1832, met at Worcester, for the purpose of forming a Provincial Medical and Surgical Association; and well do I remember the observation of a friend, with whom I had gone to that meeting, that it would be “interesting to watch the further progress of the profession and the future career of those then assembled.” Before three short years had passed, the career of this friend had ceased, and he had become the subject of one of the first biographical memoirs published in our *Transactions*. In him the twin sisters had indeed, *pari passu*, run a rapid course. Very few of the fifty who met on that occasion now remain.

But if it was interesting then to look forward to the probable future of our profession, how much more so, and how much more satisfactory, is it now to look back on what the profession has accomplished since that day. Time will only permit of my glancing at a few of the most important events in this period of our history.

It is satisfactory to see that the small body of associated medical men, who met at Worcester, has gone on augmenting by yearly additions to its numbers until it has amounted to thousands, and until it has spread its branches over the whole of Great

Britain, so as to earn and merit for our society the title of the British Medical Association; and, although more might perhaps have been done, and more certainly may be accomplished by the Association, no one can peruse the reports of its proceedings, not excepting its early *Transactions*, without advantage; and for myself, I may truly say that I never attend its meetings without gaining some information, and without being drawn by closer ties of friendship towards many of its members. It must be allowed, too, that the BRITISH MEDICAL JOURNAL has much improved in character under the direction of its present zealous and spirited editor; though, while acknowledging the value of the JOURNAL, and the talent with which it is conducted, one cannot but regret that it should absorb almost the whole of our funds, leaving so small an amount to be applied to other useful objects.

Still more gratifying is it to reflect on what has been achieved by the profession generally since the origin of our Association—just to recall, for one moment, a few of the great and striking conquests, since then, of our body militant, ever combating disease and pain.

At that time, Sir Charles Bell had not long promulgated his great discoveries, and scarcely anything was known of the minute structure and functions of the several parts of the nervous system; the observations of Laennec had only just been brought before the British medical public; Hope had not published his work on *Diseases of the Heart*; Bright's researches were little known, and not at all appreciated, though preceded by the observations of Blackall, of whom our Branch of the Association may be so justly proud. The microscope had scarcely been applied to physiological, and still less to pathological investigations; and animal chemistry had done little or nothing for either of these departments of medical knowledge. Uterine pathology, the distinction and pathology of fevers, and the pathology of various other blood-diseases, was vague and uncertain.

How vast has been the flood of light thrown on these several departments of medicine since then! But to one engaged in the daily practical work of medical treatment, scarcely anything appears of more daily practical value than the great advantage afforded in the present day, as compared with the past, by the employment of physical signs in the discovery and diagnosis of disease. It is hardly necessary for me to say how much we are indebted in this way to the microscope, to animal chemistry, the stethoscope, mensuration, percussion, palpation, the use of various specula, the uterine sound, the ophthalmoscope, and the laryngoscope; and latterly, the thermometer placed in the axilla has been usefully employed on the same principle. The origin, too, of our Association was at the time of the terrible epidemic which almost inaugurated the study of preventive medicine in this country, and rendered the great body of medical men the leaders of sanitary reforms.

Surgery has likewise undergone great changes and improvements since 1832; and long since then has rejoiced in the birth of what has been called the handmaid of operative surgery, the use of anæsthetics, so invaluable in the facility it affords in performing some of the great operations of the present day.

Not less remarkable have been the changes in the treatment of disease; and in nothing is this more exemplified than in the use of the lancet. We all know how seldom this instrument now pierces the veins of our patients; but in the fourth volume of our *Transactions* you will find, amongst others, a case described by Dr. Barlow, the leading physician of Bath at that day, to be one of ovarian disease, in which the patient was bled forty-five times to the extent of 384 ounces,



was cupped twelve times to 102 ounces, had 408 leeches applied, 16 blisters, and 6 caustic issues; besides having been salivated several times. It is only fair to Dr. Barlow to say that the patient recovered, that she married, and on November 8th, 1834, was safely delivered of three female children, who were baptised by the names of Faith, Hope, and Charity.

Now there can be no doubt that the great change amongst medical men in the employment of venesection, and various other remedies, arises from no caprice, from no change of fashion in medicine, from no change, in any great degree, of type in disease, but from the existence, in the present day, of a sounder and more enlightened pathology—from the reception in fact, by the great bulk of the profession, of every discovery in medical science and practice which is founded on truth. And this, gentlemen, appears to me to place our profession in the highest position to which any body of men can attain. We can, without any bias, worship at the pure and sacred shrine of TRUTH. Unlike some other professions, unlike the statesmen of almost every country, unlike almost every great earthly power, we have no vested interest in error. If, therefore, we receive with open arms, the investigations of science, and turn a deaf ear to the bold and ignorant assertions of the empiric, it is not because we have more interest in the one than the other, but because the one is founded on truth, and the other on falsehood and imposture.

I have glanced at a few of the progressive incidents in our history of the last two-and-thirty years. How much more may we not expect from the future? It is true that the Medical Council, from which so much was expected, has not accomplished all that was desired. It has not been able to lay down any decided educational course; it has hitherto failed to influence all the examining bodies; whilst the new national *Pharmacopœia*, from the endeavour to appease the prejudices of the representatives of pharmacy in the three pharmaceutical divisions of the United Kingdom, seems likely to share the fate of the old man in the celebrated fable who tried to please everybody. At the same time, we must admit, that a great object has been attained in the requirement of a general educational test previously to the commencement of medical study, and of a definite duration over which that study must extend. At all events, it is obvious, that a great change for the better is taking place in the education, and will take place, I trust, in the character and position of future medical men. There can be no doubt that a more liberal general education, and a more prolonged and higher course of professional study, will raise the status and character of the whole body of the profession; and even if they do not augment the cultivators of medical science, will, most assuredly, render the profession generally the more ready and enlightened recipients of every discovery in the progress of medicine.

It may be hoped, too, that the whole tone and demeanour of the body medical will thus be raised; so that we shall have no more low rivalry amongst us for Poor-law appointments, and other offices of little honour and no emolument; that no member of the profession will be found so base as to lend himself to those malicious prosecutions of his medical brethren which have lately been so frequent, and so disgraceful to those concerned in them; and that the public medical services of the country will be filled by men to whom it will be impossible to refuse their just award of merit and honour.

But in this raised character and position of the profession, one great danger and difficulty constantly presents itself before me, to which I do not think the attention of the profession is sufficiently directed.

In 1834, I was examined by a committee of the

House of Commons, appointed to investigate the subject of medical education and reform. At that committee, it was the constant fear amongst the representatives of the different medical educational bodies, and still more so amongst the statesmen placed on the committee itself, that, if the standard and position of the whole profession were raised too high, "the poor man would be deprived of his doctor."

Now, this is a most important consideration, both for the profession and the public. It is obvious that, between the pauper and those capable of paying for medical advice in the usual way, there is a large mass of industrious poor, who are, even now, most inadequately provided with efficient medical attendance. It is true, that every large town abounds with medical charities; but there is a strong feeling growing up amongst medical men, that these institutions are most detrimental to the interests of the profession. For my own part, after having paid especial attention to this question for more than thirty years, I have not the slightest hesitation in expressing my entire concurrence with the views of the editor and correspondents of the *BRITISH MEDICAL JOURNAL*, and my full conviction that most of our eleemosynary medical institutions are a great evil to our own profession, and to the very class of persons for whose benefit they were intended.

To the profession, they are an evil in many ways. The grounds on which the medical appointments are made to most medical charities are unsound in principle, and not honourable to the officers appointed. Ostensibly, they are sought from motives of charity and benevolence; in reality, they are taken for the sake of the indirect and individual advantages they promote. On the part of the governors, they are made as a favour to the successful candidates, for gratuitous services largely supplied, but which are not appreciated as they ought to be, because those services are given apparently for nothing. There is reason to believe, too, notwithstanding the great majority of bright examples to the contrary, that services thus rendered and thus accepted are not always performed with the high sense of duty and responsibility which should ever characterise the practice of medicine. All this is obviously lowering to the character and public estimation of medical men; while their material interests are seriously injured by the medical attendance which these institutions extend to a large class of persons far above the necessity of any kind of charitable assistance.

To the poor themselves, out-door hospital attendance and charitable dispensaries are fraught with evils of still greater magnitude. It is only necessary to consider, for one moment, the immense number of the poor between the pauper and those capable of paying for ordinary medical advice, to be convinced that these establishments can relieve but a very small portion of those who require such relief. The consequence is a very large amount of unattended, neglected, or badly treated disease; and even those who are deemed fortunate in having secured the benefit desired, often only obtain it after such impediments and delays as to have allowed the most tractable, and perhaps the only curable, stage of their maladies to have passed by.

Great as these evils are to the poor in a sanitary point of view, it is perfectly clear to one who has devoted much attention to the subject, that they are trifling in comparison with the moral and social injury caused by the excess and injudicious application of this system of gratuitous medical charity. The poor industrious man is generally independent of charity as long as he is in health, and it is only when sickness unprovided for overtakes him, that he is led, as a dispensary patient, to seek charitable aid, and

thus to take the first step on that downward path which leads to mendacity and profligacy.

The injury to society thus induced, by tempting the working classes to rely upon charity, instead of inciting them to provide for their own wants by their own means, in a spirit of independence and mutual help, is too large a subject to be fully discussed in this address; but I hope I have said enough to show that eleemosynary institutions are not an adequate, or the best, mode of supplying the sick poor with medical advice; and yet, if a higher position of the profession place ordinary medical attendance beyond the reach of the poor, they will be inevitably driven to this resource, or to the care of the chemist and druggist, or to the tender mercies of every quack and pretender to skill in medicine who may attempt to prey on the credulity of the ignorant.

This, then, is the danger to be apprehended from a higher position, and diminished numbers, of our profession; and it is one against which it is no less the duty than the interest of the profession and the public to provide. How to do so is the question.

Some years ago, when I was in the habit of meeting Professor Canstatt at Pisa, he informed me that, in several of the states of Germany, in one of the Universities of which he was a Professor, the object was effected by a rate on the working poor themselves; that every employer of working men was obliged to deduct from their weekly wages a certain proportion towards the support of the hospital and dispensary of the town and neighbourhood in which they resided; and that the rate thus raised entitled the rate-paying poor to medical attendance by the paid officers of the hospital or dispensary, according to the requirements of each case. In this country, a compulsory rate to meet this domestic and social want, would probably be deemed contrary to the spirit of our legislation; but the same object can be, and has been, accomplished in England by a voluntary co-operation of the poor, the more wealthy, and the profession.

The principle of self-provision and association was first applied to dispensaries by my late friend, Mr. Smith of Southam; but the plan upon which he attempted to carry out these institutions was so complicated, that the first establishments of the kind met with but partial success. It was subsequently simplified and improved by myself at Coventry; and I can now point to the complete success of the Coventry Provident Dispensary, after a most prosperous career of thirty-three years, as an indisputable proof of the practicability and advantage of this system in supplying the medical wants of the poor.

I may briefly mention that between 3000 and 4000 poor persons now provide themselves, by this institution, with prompt and efficient medical attendance, by their small weekly payments; that the committee, which includes the medical officers, carefully prevent the admission of persons capable of paying for medical advice in the usual way; and that the medical officers receive for the performance of their duties, on an average, about £150 a year each. There are now in this country several similar successful institutions. It is obvious that the advantages they extend to the working classes in a sanitary, moral, social, and material point of view are immense, while to the profession they are an act of justice; and, if extensively established, they would enable well educated medical men to supply the poor with efficient medical aid, and thus prevent the danger and difficulty to which I have alluded, as otherwise sure to arise from a more exalted state of the profession.

I will only add a very few words on the medical charities of Torquay. We have an excellent In-

firmary, which supplies within its walls medical skill, and all the appliances and requisites of sickness and accidents, of a kind and in a way which the poor could not possibly obtain for themselves in their own homes. Attached to the Infirmary is a fever-ward, into which, thanks to the St. Patrick of Torquay for banishing everything poisonous from its soil, there has been only one case admitted since it was opened. We have a Consumption Hospital, which receives about fifty cases of pulmonary disease for eight months of the year; and I think I may say, for my colleagues in this institution, as well as for myself, that we do not find any specific treatment applicable to cases of tubercular phthisis; but that we do find amongst these patients great benefit derived from good food, a comfortable and airy abode in a climate admitting of much out-door exercise, and from a constant and careful medical supervision, so as to meet and correct, *in limine*, the many incidental and intercurrent complications of phthisis, in the form of bronchitis, pneumonia, pleurisy, pulmonary congestion and hæmorrhage, diarrhoea, and the derangements of digestion so constantly attendant on this malady. Thus, and under the use of cod-liver oil in most of the patients, many cases are conducted to an improved state, and some, we have reason to hope, to permanent recovery.

We have, also, an admirable medical establishment, founded by the late Lady Culling Eardley, where ladies of restricted means, chiefly suffering from affections of the chest, are received and medically treated during the winter, on the payment of a very moderate weekly sum. This institution is evidently formed, in some degree, on the principle I have been advocating; but its medical officers have no other reward than the consciousness of doing great good. Any other reward than this, I feel assured, the medical officers of Erith House, or of any of the other charities of Torquay, would not desire until those "good times" which we hope "are coming", when there will prevail a sounder sense of what is due to our profession, and best for the interests of the public.

#### LANCASHIRE AND CHESHIRE BRANCH.

CASE OF ENCEPHALOID CANCER, CHIEFLY AFFECTING THE BONES.

By ARTHUR RANSOME, M.B., Bowdon, Cheshire.

[Read June 26th, 1864.]

J. M. G., aged 37, came under treatment in the third week of July 1863, suffering chiefly from severe pain in the left arm and shoulder-blade. In general appearance, he was delicate and thin; his complexion was sallow; eyes often rather bloodshot; conjunctiva thickened and yellowish. He had been in the habit of taking active exercise, including long pedestrian excursions.

His family history was generally good. His parents and uncles and aunts were long-lived, except that an aunt died of cancer of the breast, and several cousins had died young, of doubtful internal complaints.

The patient was delicate as a boy, and suffered much from glandular swellings in the neck and axilla, and from occasional attacks of excessive prostration and debility. Both before and since he commenced business in Manchester as manufacturer of engraved rollers, he had been much troubled with (so called) nervous headaches.

In July 1862, not feeling well, he worked rather hard at a hydraulic pump, by way of exercise; and soon afterwards was seized with sharp pains in the



intercostal muscles; which, however, gave way to anodyne treatment in two or three weeks. He continued in business during the attack; but, throughout the following winter and spring, he was generally out of sorts. His eyes were suffused; he looked "bilious"; he had frequent headache; and his urine was thick.

Early in June 1863, he again tried gymnastic exercise with Indian clubs, and soon afterwards went a walking tour in Wales, walking twenty miles a day for about three days, and bathing once or twice in the sea. At this time, he perceived a soreness in the scalp, and also felt pain in the back from using some of the muscles.

In the second week of July, he complained of severe pain in the left shoulder-blade, and began to lose his rest at night from both restlessness and pain. This pain increased, and spread gradually down the arm; and, in the fourth week of July, it extended into the back and thighs to such an extent as to resemble incipient sciatica and impede walking. It came on worse always towards evening, when he felt great "weakness and stiffness" after his day's work in town. It kept him awake at night. He was still suffering from headaches; and about this time he noticed the appearance of several small tumours upon the head, a little posterior to the vertex, fluctuating slightly, and apparently connected with the bone, but not attached to the skin. When he came under my care, they had the characters of commencing "nodes"; but there was not the slightest suspicion of any syphilitic taint. They were at first referred to a rheumatic or scrofulous origin.

In the first instance, he was treated by alkalies and muriate of ammonia; and then with quinine and iron and local anodynes; but without success.

In the second week of August, the pains in the back and limbs became so severe that he was confined to his bed. During the following fortnight, it was observed that the left hand lost power rapidly, and the muscles of the hand and forearm wasted considerably. At this time, also, several other periosteal tumours appeared on each side of the forehead, and on the left side of the head. The bowels had been regular throughout. The urine was loaded with lithates, but was not albuminous, and did not contain sugar. He was now taking two grains of iodide of potassium and ten drops of colchicum wine three times a day, but without effect. Galvanism was also used several times, but was not continued.

On the 2nd of September, when I saw him again, after a fortnight's interval, he was much altered. He was cachectic-looking, generally thinner; and the muscles of the left forearm, hand, and scapular region were much wasted, and almost paralysed. He could not appose the thumb and third finger, and yet the biceps and triceps still retained considerable vigour. The case now presented a striking resemblance to some forms of wasting palsy. Dr. Roberts saw him with me on September 5th; and Donovan's solution of arsenic, ten drops three times a day, and regular frictions of the affected muscles, were ordered. An opiate was also given at night. A slight increase of power had been gained in the hand before this treatment was commenced; but it continued to improve steadily for some weeks.

Whilst the left arm and hand were improving, the general health seemed very good. His appetite was better; he had less pain; his sleep was much sounder, and lasted five hours instead of two or three. Yet the lower limbs steadily lost strength; he became thinner; the urine was still loaded with lithates; and several other tumours appeared, one on the right side of the sternum, and one about the angle of the ninth rib on the right side; and in this last a peculiar

grating was felt, as if the bone were broken; yet the swelling was, and had been formed, entirely without pain. At the same time, it was remarked that several of the cranial tumours were diminishing in size.

On October 8th, on examining the liver carefully, it was found enlarged. It extended three finger-breadths below the ribs; and a rounded hard tumour, of about the size of a hen's egg, was felt in the middle of the right lobe. The conjunctiva had been tinged with yellow a fortnight before; but his complexion, though pale and sallow, was not jaundiced. No affection of the absorbent glands could be found, except a slight enlargement of one gland in the right axilla, which he believed to have existed since youth. The opinion was now first hazarded by Dr. Roberts, that the case was one of cancer; basing it upon the previous history, the presence of the hardness in the liver, and the colour of the skin. The patient took the Donovan's solution for a fortnight longer, and then began to take iodide of iron and liquor arsenicalis. It need not be said that all possible nourishment had been provided for him, including cod-liver oil; and he had, on the whole, partaken very fairly of food. He was also regularly rubbed every night with warm olive oil. Still the weakness of the lower limbs increased.

Towards the beginning of November, the right arm began to waste rapidly, and lost power, especially in the humeral and scapular regions; whilst he could still grasp with tolerable firmness.

By the middle of November, the lower limbs also almost completely failed him, and he was lifted out of and into bed.

At this date he was seen by Dr. Gull of London; and, from the absence of pain during the growth of the tumours, the disappearance of several on the head, and the state of the tumour on the rib, which had now broken the bone across, the opinion was given that the case might possibly be one of myeloid disease; although the number of the formations rather bore against this view.

He was ordered ten grains of iodide of potassium and half an ounce of compound decoction of sarsaparilla twice daily.

Shortly after this, on December 7th, after he had been suffering intense pain in the right leg upon any movement, it was found that the right leg was considerably shorter than the other; and, although crepitation could not at first be felt, it was soon evident that the femur was broken through in its upper third.

On December 10th, a tumour was found, apparently based upon the left sterno-clavicular articulation. This rapidly increased in size, without pain; and in a few days the clavicle was completely separated from the sternum, and drawn upwards. The tumour on the right side of the frontal bone, and several of the smaller ones near the vertex, had now completely disappeared; but another rose gradually near the anterior margin of the right parietal bone; and the largest tumour on the vertex steadily increased in size, but became softer. A small swelling now appeared about the middle of the ninth rib on the left side, almost symmetrical with that on the right.

About December 25th, he complained of great pain in the left thigh on being moved in the slightest degree; and an enlargement of the femur near the trochanter could be felt through the wasted muscles. In a week's time, the bone was completely broken through at this point.

During all this time, his general health was wonderfully good, considering his complete inaction, and that he lay on his back day and night, only occasionally raised. He ate well; his voice was firm; his

spirits were good; and he could not himself realise the danger of his condition. His bowels required the assistance of enemata; his urine was loaded with lithates, and presented numerous crystals of oxalate of lime. Bed-sores were with difficulty prevented from spreading.

On the evening of December 31st, he was suddenly seized with violent cough; and after this he gradually became worse, seemed drowsy, and talked incoherently at times. The right eyelid drooped; the right pupil was contracted; and the tongue, when protruded, was pushed to the right side, pointing to some pressure within the skull, probably from the perforation of the bone by one or both of the chief tumours on the right parietal bone. In a few days, these tumours became softer; and the jagged edges of an opening through the bone could be detected around the anterior swelling. About this time, also, another of the periosteal tumours on the right parietal bone, which for some weeks had been as large as a pigeon's egg, now gradually subsided, and in a few days almost entirely disappeared. The left pupil and eyelid now became less affected, but his mental powers remained much obscured.

On January 16th, 1864, the swelling on the sternum had quite disappeared, and that on the left ninth rib was much smaller. From this date he gradually sank, and died quietly on January 17th, at 9 P.M., retaining partial consciousness to within two hours of his death.

**AUTOPSY**, forty-six hours after death. The body was excessively emaciated. The right anterior parietal tumour had disappeared, leaving a sunken irregular depression. On dissecting back the scalp, the posterior parietal tumour was found external to the skull, attached to the periosteum. The anterior tumour had perforated the bone, and was firmly adherent to the underlying dura mater. The dura mater was roughened; and the bone appeared granular wherever, during life, tumours had been noticed externally; but there was no corresponding solid enlargement, and all the fluid had disappeared. Near the internal occipital protuberance, a tumour of the size of a walnut was attached to the dura mater; and on the inner surface of this membrane, in a position corresponding to the junction of the anterior and middle lobes of the brain, and near the median fissure, was found a small conical tumour, of the size of half a filbert, which had formed a corresponding depression in the substance of the brain. No other affection of the brain could be found.

An irregular mass of morbid consolidated material, of about the size of a duck's egg, was found in the posterior portion of the upper lobe of the right lung; and the lower lobe was infiltrated with similar matter.

The heart was small and very pale; and the glands at its base were all hardened with morbid substance, and slightly enlarged.

The kidneys were healthy. The intestinal glands were almost universally hardened, and permeated by the disease.

The liver contained, in the left margin of the right lobe, a large nodule of whitish material, of about the size of a duck's egg; and three or four smaller ones in other parts.

The right hip was examined. A large tumour, of the size of a fist, occupied the position of the trochanters; and the bone was there broken through. The tumour was light in colour, of about the consistency of healthy liver; but contained calcareous granules, as of degenerated bone.

Under the microscope, these growths showed numerous cancer-cells, and granular and fibrous material.

**REMARKS.** The extent of the malignant disease in this case was not its only remarkable feature. The degree to which the cancerous material had infected the blood was shown also by an attempt at symmetry in its distribution; by the affection of both femurs at the trochanters, of the ninth rib on each side, of both arms, and of both parietal bones.

The increasing rapidity with which the disease did its work of destruction in those parts which it successively attacked also proved the gradual extension of the contamination of the blood. Those parts of the skull first seized upon showed nothing but a slight roughening of the bone; but the left femur was eaten through in one week from its first invasion.

The disease chiefly attacked, and apparently commenced in, the osseous system. The morbid action began in or near the periosteum; but there were no osseous processes resembling stalactites, such as Lebert assigns to periosteal cancer; in fact, the course of the disease was throughout rather that ascribed to the central variety of osseous cancer, the bony tissue being gradually eaten away, until the bones were either perforated or broken.

It affected the greater part of the tissues which it attacked, by infiltration rather than by the superposition of a malignant growth. The chief tumours were those of the trochanters, of the liver and lungs, and of the dura mater.

Those portions of the skull first attacked by the disease were very slightly affected; the scalp-tumours which formed over them were probably due to irritation of the periosteum by the morbid material in its neighbourhood. When the fluid which they contained was absorbed, the erroneous impression was produced, that the disease was subsiding in these parts.

There was nothing peculiar in the nature of the morbid material itself. Dr. Roberts assures me that, microscopically, it presented the usual characters of medullary cancer.

The difficulty of diagnosis in the early stages of the complaint was very great. The wasting of particular groups of muscles may now be ascribed to cancerous action in the neighbourhood of the nerves by which they were supplied, either taking place in the spinal canal, or at some point in their course; but, at the outset of the case, the cause was hidden.

Again, the previous scrofulous taint, the absence of pain in the tumours themselves, their apparent subsidence, and the difficulty of estimating any change from his ordinary delicate appearance to a truly cachectic look—all these circumstances combined to confuse the judgment and to disguise the terrible import of the malady.

#### EAST ANGLIAN BRANCH.

CIRCUMSCRIBED OR SUPPURATIVE INFLAMMATION OF THE LIVER.

By J. W. GOODWIN, M.D., Bury St. Edmunds.

[Read June 17th, 1864.]

CIRCUMSCRIBED or suppurative inflammation of the liver can certainly not be considered a common disease, or one which the physician often meets with in temperate climates. When such a case comes under one's notice, it is not always possible to determine the cause; but we know that hepatic abscess may arise from mechanical injury, from suppurative inflammation of the portal or other veins and consequent contamination of the blood by pus, and also from ulceration of the large intestine or of the intestines generally, of the stomach, the gall-bladder, and its ducts, parts which return the blood to the portal vein, whence it



is transmitted through the hepatic capillaries. Of these causes the latter was considered by most writers as the most common; and the first cause, viz., mechanical injury, is on all hands admitted to be the most infrequent. Upon looking into the subject, it is really remarkable how few cases of abscess of the liver from mechanical injury are on record; showing that that organ has no great tendency to traumatic inflammation, and also that the external violence must be particularly severe, or occur under very unfavourable conditions, if the ribs be not a sufficient defence. Andral mentions one case of hepatic abscess from traumatic injury. Budd gives two only out of sixty-two cases tabulated by him, and I think he includes this case of Andral. Morehead, out of the large number of 318 observations, mentions only four cases of abscess from mechanical injury. Frerichs does not mention one. Ronis, Waring, and Ranald Martin have also written valuable works on the subject of hepatic disease, but I have not been able to refer to them.

The following case, which I am about to read to the meeting, is one of acute suppurative inflammation of the liver in a delicate woman, arising from a severe kick. She was admitted into the Suffolk General Hospital, June 30th, 1863. Her history is as follows. She was a married woman, aged 39, and about three and a half months previously to admission, her husband, in a quarrel, gave her a kick on the right side just over the region of the liver. This was followed by very severe symptoms, great pain, fever, and violent delirium (brain-fever, as she called it). She was attended by a medical man in this town, who applied leeches, and considered it necessary to give her very large quantities of stimulants. Her side enlarged, and she had a great deal of sickness, and was no doubt in a most critical position. After a great amount of retching, one day she vomited about half a pint of matter—very fetid, and continued to vomit small quantities daily for about three weeks, and her side decreased in size considerably. When I first saw her on June 30th, she was in a most exhausted state, and could scarcely move. Her countenance was anxious; face generally pale, with the exception of a slight flush on each cheek. She was very much emaciated. She complained of great thirst; a feeling of sickness was constantly present, causing her to retch frequently, but no actual vomiting. She had a severe pain of a burning and throbbing character in the right side, and a feeling of heavy weight there. The tongue was dry and brown; pulse very feeble, and about 130; the respirations were hurried; and she had a constant dry short cough; no expectoration. The catamenia were absent; the bowels constipated; the urine was loaded with pink lithates, and scanty; no albumen. She lay on her back as the only position in which she could get any ease, and had her knees drawn up. She said she felt hungry and sinking at the epigastrium, but had no real appetite. She could not sleep, except in short dozes, when profuse perspirations occurred. On examining her, I found the right side very much enlarged; and the region corresponding to the contour of the liver was uniformly more bulging than natural. The right hypochondrium was prominent and tense, and indistinctly fluctuating; below this the liver might be felt extending low into the right iliac region, and also into the epigastrium, and downwards below the umbilicus. Percussion gave universal dullness, and the edge of the liver could be plainly felt in different parts. Corresponding to the prominence in the right hypochondrium, the integuments were discoloured over a space of about four inches from side to side, and three inches in a vertical direction; the discoloured parts had a reddish blue colour. Handling and percussing this region

caused a great deal of pain. The urgent symptoms seemed to be the severe pain, the debility, retching, and cough; and as the bowels were confined, I ordered her drachm doses of sulphate of magnesia in an effervescing draught with hydrocyanic acid, and excess of carbonate of ammonia. Spongio-piline soaked in hot decoction of poppies was ordered to be applied to the region of the tumour, and to be frequently renewed. A night-draught of two drachms of tincture of hyoscyamus was also ordered; and beef-tea in small quantities constantly, and eggs beat up with wine to the amount of eight ounces daily.

The elastic swelling below the ribs increased in extent, and made its way in a transverse direction towards the epigastrium, at which point there soon appeared a distinct prominence, at which fluctuation could be plainly felt. The discoloration of the integuments increased in extent, but was not circumscribed, and at the prominent position in the epigastrium almost disappeared. At this point the abscess burst on the morning of July 13th, just a fortnight after admission. The opening then appeared about two and a half inches above the umbilicus, about an inch on the right of the median line, and about an inch and three quarters below the ensiform cartilage. About half a pint of yellowish bad-smelling pus was discharged, and great relief from the pain was obtained. Poultries were now applied; and the purulent discharge continued in smaller quantities daily. She now had occasional rigors, followed by heat of skin and perspirations; her sleep, however, became better, and she was able to take more nourishment, and had solid meat.

Five days after this bursting, another collection of matter had formed, and made its way out by an opening just below the ribs to the outer side of the abdomen; the first opening continues to discharge. Nine days afterwards, a third opening occurred midway between these other two; and upon each of these occasions nearly half a pint of pus was discharged, and the fever was very great.

These three openings continued to discharge for nearly two months, when the two later ones had healed up; but the first continued. Her health slowly improved, and she gradually gained strength; and in December, she was able to walk about the ward. The discharge from the opening was variable in quality and quantity; at times very slight, only brownish serum, not giving the reactions of bile, and varying from this to a thick purulent fluid, the occurrence of which is even now preceded by slight rigors, tension, and pain of a burning character, and febrile symptoms. After the discharge comes out great relief is obtained.

I had feared that there was necrosis of one of the ribs; for at times the smell is very fetid, and precisely similar to what we meet with in necrosis of bones. Mr. Image passed a probe in at this opening the other day, and it went downwards apparently for a space of two or three inches, but no dead bone could be detected. I imagine that the sac of the abscess is large and still secretes, and probably will do so for some time to come.

Her medicines were occasional aperients, quinine and acids, and opium, or henbane at night. The bowels have been constive at times, but there has always been plenty of bile in the stools, and she has never been jaundiced in the least.

About eight weeks ago, the patient unfortunately took variola from another patient in the ward. The attack was ushered in with rather severe symptoms, great fever and rather violent delirium, which, however, subsided on the full appearance of the eruption; and she has now been convalescent for two or three weeks. At the present time, she walks out; and,

though not very strong, is in very fair health. Her back pains her a good deal, and the fetid discharge is very troublesome; but I believe that time will remove all these inconveniences. The liver may be still felt much larger than natural. The area of dullness extends into the epigastrium and to the umbilicus, and the edge of the liver may be plainly felt both in the epigastrium just beneath the umbilicus and extending round to the right side. The integuments are adherent to the ribs in different places.

In this interesting case, upon first seeing it, I had no difficulty, both from the history and examination of the case itself, in diagnosing the existence of active inflammation of the liver, going on to suppuration. The great pain was no doubt due to the particular situation of the purulent collection and the stretching of the capsule consequent thereon. That there was no jaundice, was due to so large a portion of the liver being free from inflammation; and in all cases that I can refer to I find that jaundice is by no means a common symptom. Pain in the right shoulder was absent—a symptom noticed by Hippocrates as symptomatic of hepatic disease. Louis and Andral both consider it as by no means a constant symptom. Budd noticed it in five out of fifteen cases occurring in the *Dreadnought*. Annesley considered it as diagnostic of an affection of the convex surface of the liver. As regards the cough and retching and vomiting, I looked upon them as sympathetic and analogous to the pain in the knee from hip-joint disease. I think there were unquestionably three distinct abscesses or collections of matter formed whilst the patient was in the hospital, as they all burst by different openings. With regard to the treatment adopted, it was very simple; and the only grave question which occurred was for me to decide whether an opening should be made by the lancet or leave the matter to nature. The evidence of the adhesion of the integuments to the surface of the liver was very plain; but the discoloration was diffuse, and I was by no means certain that universal adhesion had taken place; and at the point where the first opening occurred, the discoloration was very slight indeed. As I am a great advocate for leaving things to Nature whenever possible, seeing that she had already caused the safe evacuation, by means of the stomach, of a collection of matter, after careful consideration, I determined not to interfere. I, therefore, supported the patient's strength in every possible way, by a free allowance of food, as soon as the stomach would bear it, and a liberal, but by no means excessive, allowance of stimulants, wine at first, a little brandy occasionally, and later she has had porter. I gave her sedatives and procured sleep; quinine and acids, to check the perspirations, improve the appetite, and give a tone to the system, and left the rest to nature.

#### CASES SELECTED FROM PRACTICE.

By WILLIAM COOPER, M.D., Bury St. Edmunds.

[Read June 17th, 1864.]

**CASE I.** *Retention of Urine of Some Years' Duration.* A gentleman, aged 50, of nervous temperament, had been, for several years, frequently under my care for dyspeptic ailments. In the spring of 1863, he became more than usually indisposed, and gave evidence of increasing debility. He still, however, continued an active life, taking his daily exercise, principally on horseback, and following his pursuits as an agriculturist. The especial features of his case were the following.

His general aspect was unhealthy; complexion sallow; he was somewhat emaciated; his skin was

dry and harsh; tongue always coated with a creamy fur, deeply fissured all over. He had considerable thirst, oppression after food, and nausea. His bowels were much constipated; the stools were unhealthy, pale in colour. His urine was of specific gravity 1015, natural in appearance and quantity; it gave slight traces of sugar occasionally, which led to its frequent examination; but without finding any further departure from the healthy condition. He had been, when young, in the habit of retaining his urine in the bladder for an unusual length of time; and when travelling, or in company, had frequently done so for twelve or fourteen hours.

Occasional alteratives, with pepsine, lime water, bismuth, and strychnine, constituted the principal treatment, and with some benefit. He continued, however, to manifest these symptoms for years, in a greater or less degree; taking but little heed of them, and riding constantly on horseback without inconvenience. On one day examining the abdomen, a peculiar pyriform enlargement, in the hypogastric region, was discovered, eliciting a dull sound on percussion, and giving the idea of a largely distended bladder. From forty to fifty ounces of perfectly healthy urine were passed daily.

He was now seen by my friend, Dr. G. Johnson of London; and the introduction of the catheter was proposed, but was not acceded to for some time. Subsequently, however, he submitted; and the result of its use was the evacuation of five pints and a half of healthy urine. The operation was followed by a severe rigor, sickness, and prostration; uneasiness in the region of the bladder, and a frequent desire to pass urine. These symptoms soon subsided; but it was some days before I could again persuade him to the further use of the catheter. The second operation was followed by symptoms still more serious; and further interference was most positively refused.

As soon as he was sufficiently recovered, he went to Lowestoft; and, after his arrival there, was suddenly seized with severe pain in the bladder and retention of urine. The catheter was introduced by Mr. Worthington, and about five pints of bloody and highly ammoniacal urine were drawn off. I saw him some short time afterwards; and he was then suffering with pain in the bladder of a severely spasmodic character, and a constant desire to evacuate its contents, without the ability to do so. He had tenderness all over the hypogastric region, vomiting, hicough, and delirium. These serious symptoms continued for more than a week, and his life was in considerable jeopardy. The urine remained bloody, ammoniacal, and muco-purulent, for some time. At the end of a month, he was able to be removed home, and is now in better health.

On reviewing the history of this case, we must, I think, arrive at the conclusion, that this condition of retention was of many years' duration; that it was produced by the habit of the patient, from his youth, of allowing his bladder to become unduly distended; and that its slow and gradual arrival at this condition of dilatation accounted for the absence of the usual symptoms connected with it. Does it not, then, become a question of practical interest to inquire, whether the previous ailments were really due to this retention? and whether, under the circumstances, the surgical interference was judicious? We may infer that, through the distention of the bladder, the ureter might have become dilated, and the kidneys chronically diseased, as in a case of prostatic retention; and thus the previous condition of illness might have been produced; still the ailments were trivial, and but little interfered with the comfort of the patient, or with his usually active pursuits.



Previously to the use of the catheter, the urine was perfectly normal, and the bladder apparently healthy, save its condition of dilatation. Its first introduction produced considerable inconvenience; the second still more so. The urine at once became unhealthy; and, after a time, complete retention, inflammation of the vesical mucous membrane, dangerous constitutional symptoms, and paralysis of the bladder, resulted. That all these grave symptoms were due to the use of the instrument, there is but little doubt; and the result proves that, although it was fully justified by the recognised rules of surgery, yet its delay, until more urgent symptoms manifested themselves, would certainly have been more prudent.

CASE II. *Impacted Gall-Bladder and Ducts.* The subject of the *post mortem* specimen which I have here was a female, who came under my care in January last. She was married, 51 years of age, had borne several children, and had been in good health until within a few months of the date of my attendance. Her family history was unfavourable; her father had died of cancer, and her sister of cancer of the liver. She was emaciated, and unhealthy in appearance; complained of pain and a sense of fulness and weight in the right hypochondrium, extending over the epigastrium, nausea, loss of appetite, flatulence, pain in the right shoulder and right groin, slight oedema of the right leg, and tenderness over the surface of the liver. Her bowels were much constipated; the stools were dark and offensive; but at this period there was no appearance of jaundice. After a time, the pain became more paroxysmal preceded by rigors and faintness. The urine contained a large quantity of bile-pigment and some albumen.

On examination of the abdomen, the liver was found to be considerably enlarged, extending across the epigastrium, and reaching as low down as the umbilicus. At its lower margin, a distinct prominence was felt, resembling a nodule. There was no previous evidence of any attack of hepatic colic.

The symptoms continued to increase in severity; the pain occurring in more frequent paroxysms, accompanied by rigors, vomiting, and great prostration. About two months from the date of my first visit, she had an unusually severe attack of pain; and she then became suddenly jaundiced, and the stools from that time were without bile. Her cerebral functions became much disturbed; the bladder ceased to act. She gradually sank, and died comatose on May 8th.

A *post mortem* examination was made twelve hours after death. The body was much emaciated; the skin was deeply bronzed; the abdomen was large. On opening it, the liver was found to be considerably enlarged, firmly adherent to the surrounding parts, much altered in structure, soft, friable, easily giving way under pressure, of a peculiar green colour, and oily in its nature. The gall-bladder was much enlarged, thickened, and hypertrophied, overlapping the lower margin of the liver; and so firmly adherent to the opposing surface of the liver, as to be with difficulty separated. It was completely filled with calculi of various sizes and character. The common duct was also closely and entirely packed with them. The mucous surface of the gall-bladder was entire; but presented, under the microscope, evidences of fatty degeneration. The spleen and other organs were healthy. The calculi were much too numerous to count, and were various in their appearance and composition. The larger ones were composed principally of cholesterine, with a central nucleus of biliary colouring matter; the smaller were without a nucleus, and consisted of crystals of pure cholesterine. There were, also, a considerable number of minute black calculi, resembling grains of black

pepper, which seemed to be composed of carbonate and phosphate of lime.

The family history of the patient, her age, her general aspect, the large size of the liver, the presence of the nodule (which, at the *post mortem* examination, was proved to be the egg-shaped gall-bladder projecting from the margin of the liver), the absence of any evidence of previous attacks of hepatic colic, and the tardy appearance of the jaundice, were strongly in favour of the diagnosis of cancer; and this opinion which I gave was confirmed by my friend Dr. Goodwin, who saw the case with me.

The paroxysmal nature of the pain, the vomiting, the frequent rigors, the subscapular pain, the sudden occurrence of the jaundice, certainly pointed to obstruction of the gall-ducts; and the appearances at the *post mortem* examination gave positive evidence of death from the latter cause.

CASE III. *Severe Hemorrhage of Doubtful Source.* John Holden, a dealer, aged 37, was attended by me, nine years since, with hepatic abscess, which burst into the right lung. He expectorated for some months a large quantity of fetid pus, frequently tinged with bile. He recovered from this attack, and remained in tolerable health until about four years from this date, when he was again seen by me, and was then suffering from a large strumous abscess in the left side of the neck. This has been continually discharging since. About the same time, he had slight cough, with a sensation of weight and uneasiness, under the left clavicle, and suddenly raised a large quantity of blood. The hemorrhage continued for some days, but gradually subsided. There was no dyspnoea; and, with the exception of a slight bronchial *râle* at the very apex of the left lung, there were, at this time, no physical signs of any abnormal condition, save some consolidation of the posterior lobe of the right lung, which had remained since the bursting of the abscess. The heart-sounds were natural; pulse good. He did not lose flesh; had no night perspirations; and there was no history of phthisis in his family.

The hemorrhage has recurred at intervals of three or four months for some time; and latterly as frequently as every three weeks. During the bleeding, blood gushes freely from the fistulous opening in the neck. The quantity is considerable; frequently exceeding half a pint. The cough has been more troublesome of late, is of a peculiar loud ringing character, and he has expectorated large masses of fibrine; some are slightly pink in colour, others perfectly white; when floated on water and unfolded, they present a very pretty appearance, shewing a complete cast of the minute ramifications of the bronchi. As many as eight and ten of these masses have been expectorated daily. He still retains his appetite, and does not lose flesh. The physical symptoms are now, slight dulness on percussion under the right clavicle, with feeble respiration and prolonged expiration. The posterior lobe of the right lung is also dull, with bronchial breathing at the lower part. The diagnosis of this case is certainly enveloped in considerable obscurity.

THORACOCENTESIS. The *Société Médicale de Paris* - *tata* after discussing the *pros* and *cons* of this important sketch seem to have arrived at the following conclusions. 1. The operation of thoracocentesis is usually unsuccessful in chronic pleurisy. 2. There is urgent necessity of operating in cases of imminent asphyxia, excessive quantity of fluid causing the displacement of the viscera contained in the chest, and resistance of the purulent collection to ordinary treatment.

# British Medical Journal.

SATURDAY, SEPTEMBER 3RD, 1864.

## THE PROFESSION OF MEDICINE: ITS INNER LIFE.

As there is no evidence in the common concerns of life more dangerous than that of false analogy, so there is none more acceptable to the philosophical imagination than the true resemblance of relations which constitutes the basis of all sound analogical argument. A joint stock company may have nothing in its aggregate existence in common with the character of the persons who compose it; but it is not so with a learned profession. Every physician and every surgeon bears about him an outer and an inner life. There is the ordinary every-day work by which he is known in the world—which represents, if we may so speak, the crust of his existence; and there is a temper of mind which is withdrawn from the business of the world, and which, happily, is often known to light up the conduct of a man who has never possessed the only infallible criterion of wisdom to vulgar judgments, namely, success. The profession of medicine, too, has its exterior of activity and stirring interest, which an indiscriminating public is too apt to confound with the money-making deeds of commercial enterprise; but of this, the superficial phase of our history, we can say nothing at present. It is with the hidden things of the life of medicine we are now dealing; and it will be more particularly our object to show that the British Medical Association is, if not the best, at least one of the most trustworthy exponents of this inner life.

It is well known that our Association reckons among its members some of the most learned and scientific practitioners of the day; but this is not all. In every principal town throughout England, the leading physicians and surgeons will be found to belong to the British Medical Association. We do not mean by this to say that we exhaust all the science and erudition in every provincial town in the kingdom; this would be to arrogate to ourselves a power which society, as it at present exists, hardly admits of our wielding. But we may safely point to the fact, that our command over the sympathies of men of cultivation has its limits rather in the direction of science than in that of learning. It is on this account that our system operates with great energy, and to an indefinite extent, as a check on the delusive and insufficient generalisations of clever sciolists. There is a confidence necessary in all human intercourse, and without it men more often suffer from their own misgivings than they would from the silent reproof of their neighbour's example. The

young practitioner, who directs his work by what he calls pure science, has no resource but in science; he has no other goods in his magazine. His principles admit of no virtue to which, where disappointed concerning the profitable effects of his practice, he can retreat. The wearing out of an old delusion serves only to put him upon the invention of a new one; but, if it be his privilege to live within the light of men who can teach him the value of the higher methods of investigation, and can show him that they have attained to the most honourable place in society by the influence of their general learning and the force of their example, he too will in time find that "it is the business of human intellect to adapt itself to the realities of things, and not to measure those realities by its own capacities of comprehension."

Now, it may be asked, why drag defective specimens of professional life before us? The answer is, that they too play a part in the secret economy of medicine; they are, as it were, the certain standard by which to estimate the character of the public bodies to which they attach themselves. Take the College of Surgeons, for example. This College, like our own Association, has a voice from within, and speaks a language and propounds a policy from the recesses of its organisation. We see before us the example of a corporate body gradually losing the disposition to preserve and the ability to improve its condition, and, in consequence, drifting into a state of feebleness. It has ever been the rule of this JOURNAL to protest against the downward tendencies of the College of Surgeons; and, although it may seem out of place to contrast our own working system with that of an establishment whose duties are principally educational, yet there is one purpose which both institutions are morally bound to keep steadily before them: both have at least an equal interest in maintaining the honour and dignity of the profession. The British Medical Association stands in no fear of sacrificing its political independence. No man of liberal views and habits can be excluded from a share in the government of such a combination; nor can the trustees of our liberties ever shrink into an ignoble oligarchy founded on the destruction of the rights of the members at large. Can the College of Surgeons say as much as this? Every form of civil society is the result of a convention in which men abdicate all right to be their own governors. It is of the first consideration, therefore, in building up a corporation, that the due distribution of its powers should be vested in men who can fathom its necessities and facilitate the various ends it proposes to carry out. It has been said, that the science of constructing a commonwealth, like every other experimental science, is not to be taught *à priori*; nor is it a limited experience that can give us this instruction. The root of our own success lies



in this, that, from the very nature of our organisation, we must always be directed by men who cannot push their opposition beyond the convenience of their constituents; and, as we reckon among our rights not only our liberties, but the very restraints we impose on ourselves, we take care to choose our leaders from a class of men whose character and position are a safe guarantee that we have not surrendered our freedom in trust without sufficient precaution.

It has often been asked, What has the British Medical Association done for the profession? The question is thoroughly a commercial one; for it means this, What has the Association done towards putting more fees into my pocket? To talk to such questioners of the tolerance of human weakness, of professional humility, of the value of moderation and reserve, or to attempt to explain the subtle properties of good taste, would, we fear, be to talk in vain.

It is true, that our Association was originally planned and moulded into shape by the energy and skill of one man; but its existence now, as a reflection of the inner life of the profession in Great Britain, is a stern necessity. The demand for the free exercise of gentle thought and scholarly communion, which is felt by the members generally, and finds its level at our anniversary meetings, is an acknowledged reality. We have entered into a contract with the household gods of social order—a contract which we have no power to dissolve at pleasure. We may tear asunder the links that bind a subordinate community, or abandon the shackles of science that oppress us in our holiday time; but we have no absolute command over the certain laws that have made us what we are. Deep-seated principles have been worked into our habits; and our world within, with all its defects, is the collective force of a silent revolution.

All this may sound like a piece of transcendental metaphysics, and may raise a cry against our bringing as evidence of a fact a state of things which is incapable of proof beyond what we feel by our instinctive conceptions. But let any one, who thinks we have no solid ground for maintaining that our Association is something more than a convenient establishment for our amusement, turn to the report of the late annual meeting at Cambridge; let him read attentively the address of the President; let him analyse the purpose, the style, and the matter of the other addresses and papers there delivered; above all, let him read the speeches that were delivered at the dinner—and then say if he can believe that these friends and partisans of the Association were merely engaged in giving lectures on the abstract principles of our science, or on the rewards and grievances of practice. When the Vice-Chancellor, in responding to the toast that Mr. Paget had given, said he had

listened to a speech “which he had never heard surpassed in eloquence”, we may be quite sure he meant that the purport of that speech was far deeper than the usual soundings of an after-dinner oration. The great moral lesson enforced by Mr. Paget's words is one which carries us beyond the limits of his fastidious and suggestive reasoning. We thank the University of Cambridge “that she has trained so large a body of our gentry and nobility, not only in fair learning, but in rectitude and mutual honour, in the love of order, in the love of freedom, in the love of home, and in all these on the foundation of the one true faith.” But we of the profession of medicine owe her a deeper debt even than this. It is this very training which has given liberty and influence to the physician. The men of light and learning in England, whose wisdom is open and direct, have been taught to trust their honour and to identify their interests with those of the guardians of their health. Society throughout the land no longer separates the educated general practitioner from its councils; nor does it deny him a participation in those enjoyments to which the common patrimony of knowledge has entitled him. The people who form the better class of our patients defer to our opinions—help at least to feed the flame of that inner lamp which is for ever burning on the altar of our domestic life.

#### BOTANICAL KNOWLEDGE AT A DISCOUNT.

WORKS on the study of Botany abound, we are told by an authority in the *Natural History Review* of July last; but it is rare to meet a person who possesses even an elementary knowledge of any branch of the subject. There is only one scientific society in the United Kingdom devoted exclusively to botany; and not one in England. In the Royal Society's *Transactions*, there have not been six papers on Botany during the present century. In London, the Linnean Society monopolises scientific botany. In the British Association, botany is rarely represented by even a small paper or treatise.

The same writer further laments that, even with regard to the men at present engaged in botanical pursuits, there are very few in the British Isles who have added anything important to our knowledge of physiological or structural botany. Cryptogamic botany, notwithstanding the improvement of the microscope, is completely neglected. The dearth of botanists, he adds, is remarkable. He naturally asks how this happens; and inquires into the system of botanical teaching in this country.

Till lately, botany was almost solely taught in medical schools. To the medical schools, we must, therefore, especially turn for information; and here a little insight into the methods

of instruction there pursued, readily explains the failure of a diffusion of botanical knowledge. The writer referred to then goes into the present system of instruction followed by botanical teachers, and lays a serious bill of indictment against it, "The schools turn out no botanists." The courses of lectures and the class-books in common use are unsuited for the medical student; the teacher aims through them to give in three months what it would take three years to learn. Botany is brought before the student in a way in which no other subject of his studies is. In botany, he is taught the abstruse and the abstract at the very beginning, instead of at the end. Our system, we are told, was borrowed from the German, "which is probably the worst in the world." In France, a better system prevails.

The writer in the journal referred to tells us that the proper method of instruction is the "Schedule system," as it was called by its proposer, Professor Henslow; and it is this system to which he especially would call attention. Its simplicity and practical character recommend it. It has been introduced into the examinations of the London University with success; and has been worked to its fullest extent by Professor Oliver. A full description of this system will be found in the *Natural History Review*.

Botany, if properly taught, is an excellent training for the medical student; it gives him habits of accurate observation; but no wonder that its abandonment, as a required course, should have been proposed, when we see the results of the present system of teaching; no wonder that the botanical class is the bugbear of the curriculum; and that it has been so for the last half century. It is very strange, the writer adds, that things are allowed to go on unchanged; that the present courses and examinations in botany are accepted as if they were the very best that could be.

"The only remedy for the existing state of matters is to make the botanical training objective and practical, at the same time that it is scientific and improving. Let the student be taught at first truths he can perceive and apply. Keep his eyes, hands, and brain, employed together, and they will find work for one another afterwards."

Such is the serious indictment brought against our present system of botanical instruction by one who appears to be an authority on the subject.

THE prosecution of Dr. Wilkins of Ealing, for the illegal detention in his house of an alleged lunatic, has given rise to much misapprehension as to the exact position, in relation to the Commissioners in Lunacy and the law, held by the numerous members of the medical profession, who have residing with them patients more or less of unsound mind. It is very essential this position should be clearly under-

stood. It is not necessary, as one of our contemporaries (the *Lancet*) erroneously states, that a licence should be obtained for the reception of one patient; but the law imperatively requires, that any patient whose mind is unsound should be, if not in the immediate care of his relatives, placed under certificates of lunacy. The detention of a patient without such certificate, becomes a misdemeanour; and is punishable by fine, and even imprisonment. We would strongly advise any professional man, who has a doubtful case under his care, to be on the safe side in this matter. The forms of certificate are easily obtained from Messrs. Shaw of Fetter Lane, and other stationers. The fact of these certificates being filed, will involve only an annual private visit from one of the Commissioners in Lunacy. These visits are invariably conducted with much courtesy; and it is, on all accounts, desirable that the requirements of the law should be scrupulously complied with, in a case of so delicate a nature as those involving infringement of personal liberty. In the event of a second patient being received into the house of a private person, a formal licence must be taken out, and expense incurred; moreover, the visits of the Commissioners must then be official, four inspections being made during the year, by a medical and legal Commissioner together, and two visits in addition by a single Commissioner. In the case of a nervous or hysterical patient, not absolutely insane, a representation of the facts of the case to the Commissioner in Lunacy, would, in most instances, obviate the necessity of any certificate, the patient remaining under care as a "boarder." In all cases, our advice would be instant and straightforward communication with the Lunacy Commissioners.

THE *Globe* is, in matters military, supposed to be inspired by the Horse Guards. It evidently is, at all events, thoroughly Horse Guardish in sentiment. Of course, it has had its article singing *Gaudeamus igitur*, over the seventy-seven lately announced successful candidates for medical military honours. Especially it is wrath with the profession generally for taking up the case of the army surgeon, and for interfering with business which does not concern anybody but the Horse Guards. In fact, it threatens Professor Douglas Maclagan with a drum-head court-martial and the cat-o'-nine-tails, for having dared publicly to recommend young Edinburgh graduates to have nothing to do with the army until army surgeons were treated as other "officers and gentlemen" are treated in the army. Not a bad specimen of the spirit of insolence which still reigns up in the regions of red-tapism at the Horse Guards! It is suggested to Dr. Maclagan that he is liable to a prosecution, for attempting to injure her Majesty's army medical service! But these Horse Guards gentlemen forget



that we have a House of Parliament: and that this question will, in all probability, be ventilated, and thoroughly, in that House next session. They forget also the lesson which Sir C. Wood received (notwithstanding Government influence), for having tried to tamper with the competitive examinations in the Indian army medical service. And, yet, they do not altogether forget these things; for in the inspired article of the *Globe*, there is a remarkable admission. Well (says the *Globe*), now that the doctors, civil and military, are beaten into a proper state of subordination, we may perhaps look into the matter, and inquire if there be any real grievance of which these medical officers can complain; now that we are no longer subjected to pressure we can deal with it, and if there be any real cause of complaint we can remove it—but, of course, not under compulsion! So that the Horse Guards has, in truth, regarded all the petitions, deputations, and memorials, with which it has of late been assailed, as so many breaches of discipline, as acts of grave insubordination. It has been unable to treat the subject on its merits, because the profession has been acting the part of insubordination! It is something, however, at all events, that these high gentlemen should be brought to confess, that there may be some grievances affecting the army medical officer. Perhaps, with the prospect of the next session of Parliament before them, they may go a little further, and even discover and acknowledge that grievances do exist, and perhaps alleviate them—but, of course, not under any insubordinate pressure from without. And yet, after all, how can we blame authorities who err, through ignorance, it may be, as well as pride? How can we hope that authorities purely military can be properly advised in matters medical, if they are not properly advised by medical knowledge? It is here that our army medical system fails—here, in not being presided over by medical science, medical experience, and medical authority, such as would enforce upon Commanders-in-Chief the adoption of all its reasonable propositions. The go-between between the Army Medical Service and the Government, should be the representative at once of high medical knowledge, of large military experience, of deep professional sentiment, and then, of course, it would possess that full authority which such qualities give to men who occupy positions of mark, and who have in their hands the interests and welfare of others, their subordinates in office but their brethren in profession.

In a letter, written by Antoine Louis, Secretary of the French Royal Academy of Surgery, of date March 18th, 1757, the thanks of the Society are given to M. Sibelle, Surgeon of L'Abbaye Royale at Longport, for the observations he had sent them of a case of

“Cæsarean operation performed on a living woman. The necessity of the operation was evident; but you did not follow the rules of the art in performing it. No author prescribes the incision in the linea alba, and the suture you employed is different from all hitherto described. As regards the incision which you thought it necessary to make into the bladder above the pubes, on account of the difficulty of introducing a catheter into the bladder, we do not think the difficulty insurmountable; in fact, it is easily removed by putting the patient in a sitting position, and elevating the womb.”

M. Sibelle does not appear to have been satisfied with this and some other criticisms of the Academy on his proceedings, and gave them a rejoinder. To his rejoinder, the Academy again replies:

“Your second observations have been carefully considered. But we have not accepted the reasons you offer in favour of making the Cæsarean section in the linea alba. The example of lithotomy above the pubes is not conclusive. You think that the mother and child would have perished in your hands, if you had made the lateral incision; but it appears that you would have quite as readily extracted the child, and have introduced two fingers into its mouth, as you say you were obliged to do. The sutures, you say, tore the wound in consequence of the movements of the woman; and you consequently thought it necessary to cut them in order to prevent further mischief. You conclude, from this case, that sutures are not applicable in wounds of the abdomen; and that the many tailed bandage, applied as in fractures, is best adapted for uniting the edges of the wound.”

THE usual results of a discussion in which all parties have made up their minds before commencing, were well exemplified in the late discussion at the Academy of Medicine touching the sounds of the heart. “As you were” are the last words uttered on such occasions. At the conclusion of the discussion, M. Garret observed:

“Thus, as we have seen, the opinion of M. Beau (that the second sound coincides with the ventricular systole) has been attacked on every side, and upset from its very base. One by one, all his arguments, on which he has expended so much energy and so much talent, have been overthrown; and all that remains of them is a confused mass of vain conceptions.”

To which rejoins M. Beau:

“It is useless for me to reply; I have nothing to add to, and nothing to retract from, what I have said. I thank the Academy for having so kindly listened to me.”

A DISCUSSION on Iridectomy, has lately taken place at the French Surgical Society. M. Demarquay said that he had seen many operations of iridectomy performed in England in acute and chronic cases of glaucoma and in other eye-diseases. Every case he was shown was a success; but no doubt there must be some failures. M. Le Fort said that he had seen iridectomy performed in England and in Germany. “In those countries, the operation is practised with surprising readiness, in an off-hand way, and in the most unimportant diseases of the eye (*petit les*

*moindres cas de maladies des yeux*). In Berlin, he had seen, under Von Grafe, a large number of operations. In seven or eight of them, hæmorrhage had taken place into the anterior chamber; but the blood was squeezed out by gentle pressure, and no ill results were produced.

Dr. Caffè tells us that the "dry diet" is a capital curer of certain diseases. Obesity and syphilitic diseases, galactorrhœa and bronchorrhœa, etc., are arrested thereby. The way it is practised in the East is this. The patient is located in a place of moderate temperature; and his food consists exclusively of biscuits, dates, and raisins. A glass of water is "put at the disposition" of the patient—patient, indeed!—who is, however, only allowed to drink it *guttatim*, sucking it through a straw! This *regime* may be supported—we suppose Dr. Caffè means by the placid Oriental—for months!

Dr. Le Cœur recommends the cure of itch by the pleasant application of aromatic vinegar. He has for years employed this simple economic remedy, with constant success. The vinegar should be rubbed in with a roughish sponge. Four or five frictions generally effect a cure. A warm bath will remove any erythema which may arise. "I recommend my *confrères* to try the remedy," he says.

Dr. Frérel of Prague has been appointed Clinical Professor at the Russian University of Chartkow.

The meeting of German naturalists and physicians takes place this year at Giessen, from the 17th to the 23rd of September.

Dr. Bonnejoy details in the *Gazette des Hôpitaux* a case of aphonia "instantaneously cured by electricity".

At the Society of Medical Sciences at Lyons, M. Ollier presented a specimen of an arterio-venous aneurism at the bend of the elbow, which had been cured by extirpation of the sac and ligature of the ends of the artery. Compression, applied before the operation, had prepared the way for a ready establishment of a collateral circulation.

M. Langier, of the Hôtel-Dieu, communicated to the Academy of Sciences a case of laceration of the soft parts of the arm, in which he had brought together and ligatured the torn ends of the median nerve. No bad consequences followed the operation. On the evening of the day of the operation, sensibility was partially restored; on the following day, it was much increased.

In 1863, at Milan, 123 persons (98 men and 25 women) presented themselves at the hospital, having been bitten, 113 of them by dogs, and 10 by other animals. The bites were by far the most frequent during the hot months of the year. Thus, between April and September there were 83 cases, and 40 in the other months. A complete statistical account of these cases is given in the *Annali Univ. di Medic.*

### THIRTY-SECOND MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT CAMBRIDGE, AUGUST 1864.

BROTHER-ASSOCIATES of the healing art,  
From Cambridge now we are about to part,  
And shall we part, nor faithfully confess  
Our joy and pride and grateful thankfulness,  
That at this seat of learning we should be  
Received with such distinguished hospitality?

A kind and cordial invitation calls  
Our body to assemble in these halls:  
A compliment and honour, which, before  
Long coveted, is valued now the more.  
As proudly through these Colleges we roam  
Such welcomed guests, we feel almost at home,  
Such delicate attention 's shown to all  
Who visit Chapel, College, Court, or Hall.

Medicine! at once a science and an art,  
High avocation for the head and heart;  
Man's noblest occupation through all time,  
Honoured of mankind in each age and clime;  
Noble profession! well may Science be  
Proud of the sons whom she can claim of thee,  
For in what sphere of knowledge but some son  
Of medicine has the highest honours won?  
And Cambridge stands preeminent in fame,  
While Caius' College boasts of Harvey's name.

Cambridge! time honoured and unrivalled name,  
Grand synonym for scientific fame,  
Whose pride it is to train the mind of youth  
In the strict school of mathematical truth;  
Whose irrefragable and rigid rules  
Transcend the subtlest logic of the schools,  
However syllogistic or exact,  
As Reasoning transcended is by Fact;  
For Fact transcendeth ever argument,  
An axiom from which there's no dissent;  
Though facts, however numerous, are vain,  
If left unlinked to reason's golden chain.

But now most satisfying facts appear,  
Linked by concatenations of good cheer;  
And ranged with such considerate prevision,  
It looks like mathematical precision.  
Each day, each hour, some hospitable board,  
A breakfast or a luncheon will afford.  
While private table or collegiate hall  
Provides a sumptuous dinner, spread for all.

Science and Art their rarest stores display,  
Nature her beauty adds, until the day  
In some grand *conversazione* ends,  
Where old friends meet, and strangers are made friends;  
While woman's presence, with a sense of soul,  
Sheds her refining influence o'er the whole.

Cambridge, ere from my enraptured vision fades  
This far famed scene of gardens, lawns, and glades,  
May I adventure in my verse to touch  
Upon a scene which all admire so much,  
And tell to those who here have never been,  
What beauties on the banks of Cam are seen?

Smooth flows the Cam, most classical of streams,  
Now dark in shade, now bright in sunniest beams,  
While the quick fish from out the water rise  
To snatch their dainty feast of summer flies.  
Now underneath some bridge the river glides,  
Whose graceful arch the stream, one moment, hides;  
Still flowing by fair gardens and famed trees,  
Beneath whose shade the student reads at ease;  
Or should he raise his eyes and look around,  
All he beholds is consecrated ground:



Courts, halls, spires, chapels, colleges, arise,  
 Boldly projected on the clear blue skies,  
 While thoughts come thronging of each famous name  
 That here once lived, or founded here its fame:  
 Such scenes of grandeur and of grace combined,  
 With noblest aspirations fill the mind,  
 And help to make each youth, what all should be,  
 An honour to his University.

But harken! psalms, hymns, hallelujahs rise,  
 Swelling in fullest chorus to the skies;  
 While music's mightiest, sweetest powers combine  
 To lend to human accents tones divine,  
 In yon grand, glorious, ancient Chapel, where  
 Our brotherhood, assembled now in prayer,  
 Offer the soul's thanksgiving up to Heaven  
 For all the good that God to man has given.

R. T. E.

August 6th, 1864.

## Progress of Medical Science.

### SURGERY.

**EXTENSIVE WOUND OF FACE: RE-ADHESION OF FLAP.** A robust well-made Arab was admitted in November into the military hospital at Orléansville, under M. Vallin, with an extensive wound of the shoulder and also of the face. He had been struck by a yataghan on the face, obliquely from left to right. The wound passed from the lower lip to the upper, divided obliquely the left nostril and nasal cartilage, and lacerated the external two thirds of the lower eyelid; and the blade of the instrument had glided over the malar eminence and stopped in the upper lip, about a *centimètre* from the left commissure. Thus there was formed a large flap, comprising the nose with its cartilages, and the anterior part of the upper jaw-bone with the four upper incisor teeth; it was completely detached from the face, and hung down on the upper part of the chest by a pedicle formed from the upper lip, about six *millimètres* in length, but of the entire thickness of the lip. The parts, before the man's admission into hospital, had been brought together with ten points of suture and adhesive plasters. On the following day, the portion of the left cheek which formed nearly the whole fleshy part of the flap, had a temperature much lower than that of the other side of the face; the flap appeared withered; the four incisor teeth, fixed in their sockets, were adherent to it. These were fastened by silver wire to the two first molars (the canines being absent), and were further secured by two small bands of gutta-percha, one placed in front and the other behind. Under the use of warm vinous fomentations, the circulation became more active. But, partly from the restlessness of the patient, who constantly pushed the incisor teeth forward with his tongue, and partly from the weight of the flap dragging on the sutures, the latter gave way, and the flap slipped downwards. The parts were restored to their normal position, and twelve new twisted sutures were applied in small pins; the fragment of the maxillary bone, with the incisor teeth was removed by means of a bistoury, as it was not thought likely to reunite; and, to overcome the gravitation downwards of the flap, two soft hooks were introduced into the nostrils, and fastened to the forehead by bandages.

From this time, the wound commenced to cicatrise at the right ala nasi, near the external angle of the eye; the lower eyelid, however, had been so much injured that its free border sloughed, and ectropion was left after cicatrization. It was found necessary

to freshen with a bistoury the edges of the wound in the upper lip, as they had a tendency to cicatrise separately; they were brought together, and united by twisted sutures. In the middle of the following January, the patient was discharged cured, with the exception of the ectropion, on which he would not consent to have an operation performed. (*Gaz. M'd. de l'Algérie, et Bulletin Génér. de Thérap.* 30 Juillet, 1864.)

**SYPHILITIC DISEASE OF THE EPIDIDYMIS.** M. Dron, of the Antiquaille Hospital at Lyons, describes syphilitic disease of the epididymis as not being rare, although it is scarcely described by writers. M. Dron has noticed sixteen cases in the course of six months; in fourteen the disease was confined to the epididymis, and in two there was also syphilitic orchitis. In none of the cases could the affection of the epididymis be referred to any other cause than syphilis, and the efficacy of the treatment employed confirmed the diagnosis.

Syphilitic tumour of the epididymis generally occupies the head of the organ; sometimes, but less commonly, the engorgement extends to the whole organ, but even then the head is the part most affected, and continues enlarged for a longer time. In one case only was the tumour situated on the tail. Both sides are commonly affected at once; but usually one epididymis more than the other. The tumour is generally not larger than an olive or hazelnut, sometimes even as small as a pea. In consistence it is always solid and resistant, but in various degrees; in old and indolent cases, it acquires a cartilaginous hardness. The surface is unequal and nodulated. When the tumour has acquired a certain size, it lies against the testis without it, such as occurs in epididymitis. The testis can always be easily distinguished. Most commonly the epididymis and its tumour remain detached from the testis. The syphilitic engorgement of the epididymis may be completely painless, even on pressure; the patient frequently does not perceive the tumour until his attention is drawn to it. In some cases, however, pain is produced by compressing the tumour; and, in others, the tumour is spontaneously painful, especially at the commencement, and it is in such instances that it attains the largest size. Even in these cases, however, the patients have not been obliged to interrupt their occupations. The functions of the organ do not seem to be interfered with by the disease. As far as can be observed, syphilitic disease of the epididymis appears about three and a half months after chancre. It probably appears later in some cases; but even when it appears early, there are also severe and tedious secondary affections, such as papular or squamous skin affections. If left to itself, the tumour has an indeterminate duration; but, if properly treated, has always been removed in M. Dron's cases. Two months are generally necessary; but a cure may be effected earlier. In one case, the organ suppurated.

Syphilitic tumour of the epididymis cannot be confounded with acute blennorrhagic epididymitis; but there may be difficulty in diagnosis when chronic epididymitis occurs in a syphilitic patient. But, in the latter case, there will be a history of gonorrhoeal discharge; and this may even be present. The patient also will have had symptoms denoting acute inflammation; while the development of the syphilitic epididymis is not attended by any such manifestations. If left to itself, the gonorrhoeal engorgement tends to disappear; the syphilitic remains. The former, after invading the entire organ, becomes limited to the tail, where it remains for a considerable time; the syphilitic disease almost always commences in the head. Finally, blennorrhagic epididymitis is com-

monly single; while the syphilitic disease generally occupies the epididymis of each side.

Tuberculous disease of the testis, concurrent with syphilis, may at the commencement be confounded with syphilitic epididymitis; the disease appears in the head of the organ, is indolent at the commencement, and the tumour is hard and nodulated. In the tuberculous disease, however, the nodules grow and project, and at the same time become soft and painful. The skin becomes adherent to them, ulcerates, and allows the escape of a soft cheesy mass, mingled with pus. The vas deferens often becomes moniliform in consequence of the deposition of tuberculous matter in its interior; and this deposit also takes place in the vesiculæ seminales, prostate, etc.

M. Dron regards the presence of syphilitic epididymitis as being always indicative of a severe syphilitic affection of the system, especially when the local disease returns frequently and is very intense. In all the cases, however, which have come under his notice, the disease has been subdued by treatment.

The lesion of the epididymis rarely exists alone; and hence the treatment is generally guided by the concomitant symptoms. Thus, according as secondary or tertiary symptoms have been present, mercury, iodide of potassium, or a mixed treatment, has been used. The duration of the treatment requisite for the disappearance of the tumour has varied from a fortnight to nine months. (*Archiv. Génér. de Méd.*; and *Gaz. Méd. Paris*, 30 Juillet, 1864.)

**LYMPHATIC TUMOURS.** At the meeting of the Surgical Society of Paris on June 22nd, M. Trélat related the case of a young man who had come under his care with a rare disorder—tumours formed of dilations of the lymphatic vessels. The patient was robust and of good muscular development. He was a native of the island Bourbon, which he had left for the first time in order to come to France. He had never had syphilis; there was no trace of scrofula, nor were there any enlarged glands in the neck or axillæ. When he was about fifteen years of age, a small enlargement appeared below the fold of the left groin; and soon afterwards, while performing gymnastic exercises, the patient was seized with severe pain on the right side, which was found to proceed from an inguinal hernia. This was reduced, and a truss was applied; but the region above the pad remained enlarged, especially after walking or exertion—there was, in fact, a tumour in the right groin also, independently of the hernia. The patient at first paid no attention to the malady; and could not inform M. Trélat whether the tumours grew rapidly or slowly. He stated, however, that they had remained nearly stationary during the last four years.

When M. Trélat first saw the patient, he had an inguinal hernia on the right side. In addition, Scarpa's triangle on each side was occupied by a tumour elongated from below upwards. The tumour on the right side was 12 centimètres long by 7 centimètres broad; that on the left side was 13 centimètres by 8. The former descended somewhat lower than the other; but that on the left reached as far upwards as the internal orifice of the inguinal canal. The tumour on the right side was a little more projecting, more regular, and softer. That on the left side presented several lobules, of about the size of an almond, formed by the lymphatic glands. With these slight differences, the tumours were alike on the two sides. The skin presented no change of colour; it had not that bluish tint which is observed in varix and some subcutaneous erectile tumours. The surface was regular, perfectly normal, without that orange-rind appearance of the skin which is observed in varix of the superficial lymphatic network. No lesion or alteration of any

kind could be detected in the two lower limbs. The skin was perfectly moveable over the tumours, which could also be readily moved over the deeper parts. The swellings were soft, could be compressed in every direction, and felt like lipoma, from which, however, they differed in being reducible. Another diagnostic sign was furnished by the rarity with which symmetrical lipomata exist, without the presence of other similar tumours irregularly scattered elsewhere. During about four months, the patient had complained every three or four days of vertigo, accompanied by dyspepsia; the symptoms were removed by lying down and simple treatment. This reminded M. Trélat that a patient whose case was described in 1854 by MM. Desjardins and Gubler, and who had lymphatic fistulæ, was troubled by *malaise*, nausea, and vertigo, when she had lost a considerable quantity of lymph; and that a patient seen by Amussat had severe symptoms which ended fatally. M. Trélat's patient, however, had lately been very anxious about his disorder; and this alone might be sufficient to account for the dyspepsia and vertigo. Moreover, the vertigo had occurred only once during his voyage, and not since his arrival in France; since which his digestion had been very regular, and he had been able to bear exertion more easily than in Bourbon.

M. Trélat observes, that lymphatic varix appears especially frequent in warm countries. Thus, Amussat's patient was from the island of Bourbon; that of MM. Desjardins and Gubler from the Mauritius. Of four patients observed by M. Nélaton, two were originally from Brazil or the colonies; and Drs. Saint-Perne and Petit, who have practised in Bourbon, have informed M. Trélat that of several instances of lymphatic tumours in natives of that region, the patients were mostly young, the ages varying from 17 to 23; one only was 39 years of age.

M. Trélat did not entertain the idea of removing the tumours; and in this he was supported by the experience of M. Nélaton. Some years ago, M. Nélaton, at the urgent request of a young man, decided on excising one of these lymphatic tumours. The diagnosis being uncertain, an incision was made over the mass, when a considerable quantity of thickish milk-like fluid escaped, leaving only irregular flaps, and some beaded filaments which were removed. The patient, a young robust man, was soon seized with rigors and symptoms of purulent absorption, and died. The tumour on the opposite side, which had not been operated on, was injected with mercury by M. Sappey, and was shown to consist of a network of varicose lymphatic vessels.

Compression was applied in M. Trélat's case by one of Bourjeaud's bandages; which was, however, obliged to be modified several times to meet the difficulty experienced in keeping up pressure. This was the only treatment that had been employed; and M. Trélat was desirous of learning from his colleagues in the Society, whether it would be justifiable to attempt to evacuate the contents of the swelling through an artificial fistulous opening. Some observations, principally bearing on the diagnosis of lipoma, were made by MM. Verneuil, Morel-Lavalée, Guyon, and Larrey; and the unanimous opinion was expressed, that operation was not advisable. (*Gaz. des Hôpitaux*, 5 Juillet, 1864.)

**STRANGULATION OF THE SPERMATIC CORD AS A SUBSTITUTE FOR CASTRATION.** A man, aged 70, was admitted into the Orvieto Hospital, having had for twenty years an encephaloid tumour of the right testes. The tumour was large, uniformly soft and elastic; but non-fluctuating and opaque. The patient had lancinating pains extending along the cord into the abdominal cavity. Instead of excising the tumour



M. Reali performed the following operation. Standing to the right of the patient, he seized the spermatic cord with the thumb and fingers of his left hand, and raised the part so as to make the skin tense. An incision an inch and a half long was then made, and the cord was laid bare. The operator then opened the sheath, and, by means of a needle, introduced a strong thread, by means of which he rapidly and completely strangled the end. The thread was tied tightly, and the ends were left between the edges of the incision. The result of the operation was very satisfactory. The ligature was detached on the fifteenth day. Two months after the operation, the wound was entirely cicatrised, and the volume of the tumour had diminished nearly one-half. The tumour continued to decrease; and, ten months after the operation, the testis had returned to its normal size. The cure was permanent. A second operation of the same kind performed on a man 40 years of age, was less fortunate; the patient died of the sequelæ of the operation. In a third patient, a young man aged 23, who had an almost stony enlargement of the testis with a slight serous collection, the result was as satisfactory as in the first case. The testis, which had been four times as large as the other, was reduced almost to its normal size. (*Annali Univers. di Medicina, and Gazette Méd. de Paris, 2 Juillet, 1864.*)

**FISTULÆ FOLLOWING LITHOTOMY IN CHILDREN.** A fistula, says M. Guersant, is sometimes left after lithotomy; it may be vesico-rectal or vesico-perineal. Of three cases of recto-vesical fistula which M. Guersant has seen, two were cured spontaneously; the third resisted all treatment, and the fistula remains, the urine escaping involuntarily, sometimes with fecal matters. M. Guersant has seen cases of perineal fistula in children on whom lateral lithotomy had been performed months or even years previously. He has treated them by cauterisation with nitrate of silver, but always without success, from not being able to act on the entire course of the fistula. He has also tried a thread seton, introduced into the fistula and brought out through the urethra; but has derived most success from cauterising the whole course of the fistula with a stylet at a white heat. (*Bulletin Génér. de Thér., 30 Juin.*)

#### MIDWIFERY AND DISEASES OF WOMEN.

**OBSTINATE VOMITING AND DIARRHŒA DURING PREGNANCY: ARTIFICIAL PREMATURE LABOUR: RECOVERY.** A woman aged 29, of extremely nervous temperament, had been much harassed by obstinate vomiting during her first pregnancy. On July 15th, 1863, she had arrived at the eighth month of a pregnancy still more disturbed than the first, inasmuch as to the repeated vomiting there was added diarrhœa, which could not be restrained by any remedies. From the third month to the sixth, the alvine flux had been moderately abundant each day; but from the sixth month to the commencement of the eighth, it was excessive. Hence, the entire series of astringents and bitter tonics having been exhausted, and the mother being very weak and the fœtus scarcely viable, M. Ligé of Mans determined to induce premature delivery. He first applied nitrate of silver to the orifice of the cervix uteri, according to the plan recommended by Professor Giordano of Turin; but no effect was produced. Nine uterine douches were administered at intervals of twelve or fifteen minutes, and delivery was soon effected. The child, a male, was rather small and very feeble: it soon died. The mother, although much exhausted, gradually reco-

vered her health under the influence of a tonic and reparative regimen. (*Union Méd., Dec. 1863; and Bull. Génér. de Thér., 15 Jan., 1864.*)

**SOURCE OF HÆMORRHAGE IN CASES OF UTERINE TUMOURS.** At a meeting of the Edinburgh Medico-Chirurgical Society, Dr. Matthews Duncan exhibited a fibrous tumour removed from the uterus of a woman who had died after suffering from profuse monthly attacks of menorrhagia. The tumour, moderately hard, lay in the fundus of the uterus, and was permeated by venous sinuses capable of admitting a crow-quill. It was surrounded by uterine tissue; and in the layer between the tumour and the peritoneum there was a network of enormous uterine sinuses. At about the centre of the part where the tumour projected into the cavity of the uterus, was a small clot, partly filling a round opening about one-twelfth of an inch in diameter, through which a probe could be easily passed into the uterine sinuses. Dr. Duncan observes that the presence of these sinuses accounts sufficiently for the hæmorrhage; and that the bleeding occurred only at the menstrual periods, during the congestion of the organs, while, at other times, the sinuses were comparatively empty. The case appears to him to indicate the use of means to diminish the impetus of the blood or to moderate congestion in the pelvic viscera. It further points to the value of attempts to restrain the hæmorrhage by compression, in whatever way applied. (*Edin. Med. Journ., Jan. 1864.*)

## Association Intelligence.

### THE MEDICAL PROVIDENT FUND.

DR. RICHARDSON begs to announce the following contributions to the Guarantee Fund—

|                                    | £   | s. | d. |
|------------------------------------|-----|----|----|
| Amount already contributed.....    | 199 | 10 | 0  |
| R. Ceely, Esq. (Aylesbury) .....   | 5   | 5  | 0  |
| W. Adams, Esq. (London) .....      | 5   | 5  | 0  |
| Dr. Johnstone, (Birmingham) .....  | 5   | 5  | 0  |
| G. May, jun., Esq. (Reading) ..... | 5   | 5  | 0  |
| J. H. James, Esq. (Exeter) .....   | 10  | 10 | 0  |
| Dr. D. L. Thorp (Cheltenham) ..... | 21  | 0  | 0  |

Further contributions will be announced.

12, Hinde Street, Manchester Square, W.

### WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., *Hon. Sec.*

Taunton, September 1864.

**THANKS TO THE ACCOUCHEUR.** At the late annual meeting of the Ohio State Medical Society Professor Weber offered the following resolution, which was adopted amid tremendous applause: "Resolved, That the thanks of this Society, as well as the good wishes of all the good citizens in the land, are eminently due to our venerable fellow-member, J. G. Rogers, M.D., of New Richmond, Ohio, for the skilful manner in which, on the morning of April 2nd, 1822, he assisted into this world Ulysses Simpson Grant, the commander of the American armies, the hero of Vicksburg, and the predestined destroyer of the great rebellion."

## Special Correspondence.

### BELFAST.

[FROM OUR OWN CORRESPONDENT.]

FROM the nature of the combatants during the recent riots, it is impossible to ascertain the exact number of killed and wounded; but it is supposed that about three hundred persons have been more or less injured. Of these, about sixty suffered from gunshot wounds, and seven have died. The gunshot wounds have been chiefly in the lower extremities and the abdomen. This is worthy of remark; and it might be inferred therefrom, that the shots were not only intended to take effect, but were fired by persons skilled in the use of firearms.

The General Hospital affords, at present, an ample and excellent field for the study of gunshot wounds. In one case which has just proved fatal, the bullet, after smashing both ulna and radius (the arm hanging down at the moment), passed through the posterior inferior spinous process of the ilium, through the gut, and lodged in the sacrum. Amongst the cases under treatment, is one in which the bullet passed superficially across the inside of one thigh, destroyed one testis, and passed through the second thigh behind the femur. Several persons were severely wounded in the lower extremities, some of which had to be amputated. There is one bad case of depressed fracture of the side of the skull, in which there has been some loss of brain-substance, and in which Dr. Browne removed portions of a felt hat and a newspaper and depressed bone from the wound. The opposite side is entirely paralysed. Another man was shot below the clavicle, and the bullet passed through the lung and scapula, and lodged beneath the integuments, whence Professor Gordon removed it. Several have had bullets passed through the soft parts about the shoulder-joint. There are a couple of cases where the bullet has lodged, and in which its position has not been ascertained. Some eyes have, also, been destroyed by gunshot wounds; and the scalp has, in some instances, been very severely injured by blows. The difference of appearance of the entrance and exit of the bullet is well marked in many of these cases; and the different effect of a spent ball to one in full speed may be well studied.

Since writing the foregoing, three cases have proved fatal in the General Hospital; viz., one man who was shot through the chest; another in whom the left parietal bone was smashed in, the brain protruding; and a third who died from tetanus, resulting from a gunshot wound in the front of the thigh. An immense number of persons—about 5,000—followed the remains of one of the deceased to the graveyard; but there was no disturbance of the peace. About 150 persons were injured during the riots, and in nine cases fatally.

THE MEDICAL CONGRESS at LYONS opens proceedings on September 26th.

## Correspondence.

### THE TESTIMONIAL TO MR. GRIFFIN.

LETTER FROM D. GRAHAM NIVEN, ESQ.

SIR,—I have observed with pleasure that the long and persevering efforts of our fellow associate, Mr. Griffin, to improve the position of the Poor-law medical officers, are at last about to be recognised by his fellow practitioners.

Although no longer a working member of the profession, I have as vivid and feeling a recollection of the "troubled waters" which beset the path of the "parish doctor", as a twenty years' experience can give—a recollection which will always command my ready and willing support to any movement which has for its object the ameliorating the position, both socially and financially, of that hard-worked and ill-paid public officer.

Having resided last winter at Weymouth, I had the pleasure of becoming personally acquainted with Mr. Griffin; and also an opportunity of forming some idea of the amount of labour he has for so many years and so generously undergone in the good cause. The result was a feeling of surprise that so great an amount of really hard work should have been allowed, for so long a time, to pass unrewarded. I felt assured, however, that, sooner or later, that reward must follow; and it affords me much pleasure to give the movement my humble but hearty support.

I have forwarded my subscription to Dr. Fowler; and I hope the present comparatively small amount subscribed will be largely increased; that the name not only of every Poor-law medical officer, but of all who wish well either to him or to the sick poor who are placed under his care, will be found in the list of subscribers.

I am, etc.,

D. GRAHAM NIVEN.

26, York Crescent, Clifton, Bristol, Aug. 26th, 1864.

### THE INDIAN ARMY MEDICAL WARRANT.

[The following extract from a letter, not written for publication, is from the pen of a gentleman who has served upwards of twenty years in India.]

"You will be anxious to know what I think of the new Medical Warrant for India. I can only say, as far as I am personally concerned, that though it has not given me all I should have asked for, or have liked, I feel it is a very great improvement. But, though I am a gainer in every way, still, I am sorry to say, there are others whom it will in a short time injure severely. Upon the whole, it must be looked upon as a great boon to the service. Whether it will induce good men to enter the service is another question, of which I can give no opinion. It certainly will not induce me to remain in it one day longer than I can help. I inclose a rough draft of the rates of pay, according to the new and old scales. It is difficult to make the old scale exact; for every branch of the service had a different scale of pay. Now, a man will be paid according to his rank or standing—no matter with what branch of the service he is engaged. From this draft (see below), you will see the surgeons with Europeans, and senior assistant-surgeons in charge of native corps, are the losers. It comes hard upon them; but then all assistant-surgeons now in the service will gain a year's promotion by it. If you calculate it in this way, and see what a man would receive in thirty years according to



each scale, say he was promoted to the rank of surgeon after thirteen years' service—

|                             | By old scale. | By new.      | Balance.    |
|-----------------------------|---------------|--------------|-------------|
| With European Infantry..... | Rs. 234156    | ..... 251448 | ..... 16292 |
| With Native Infantry .....  | Rs. 211800    | ..... 251448 | ..... 39648 |

So he would gain £1,600 in the one case, and £3,965 in the other, besides the advantages given in furlough pay, which is all gain. Still, after all that has been done, we are not put in a position of equality with the military. The lieutenant colonel or major, when in command of the regiment, the adjutant, the paymaster and quarter-master, all draw staff-allowances, besides the pay of their rank; and the captain or lieutenant draws allowance for charge of his company; and I fancy this will be still a subject to grumble about; as, in giving us the pay of our rank, they have withdrawn the staff-allowance for medical charge of a regiment, which used to be 300 rupees, or £30, a month. Nay, they have withdrawn this from the surgeon, but given to the assistant-surgeon 150 rupees, if he should chance to be in charge; on what principle of justice, I cannot understand. It appears another Warrant is to come out shortly. Whether it is to upset this one, or to settle a number of vexed questions, it is difficult to say. But you see the present Warrant says nothing about our medical regimental fund, the number of deputy inspectors-general we are to have, and several other subjects of vital importance to the service. However, I am altogether rather agreeably disappointed; for I never expected to gain much. What I did expect I have not got—an increase to the rate of our pensions, which is still much below the rate of our more fortunate brethren belonging to the Horse Guards. Not that I would accept the increase, if I had to serve under such men as regulate matters at the Horse Guards."

|   | Old scale of allowances. |    |    | New scale of pay. |    |    |
|---|--------------------------|----|----|-------------------|----|----|
|   | £.                       | s. | d. | £.                | s. | d. |
| <i>Surgeon-Major of 25 years' service.</i>      | 1013                     | 0  | 4  | 1183              | 2  | 0  |
| European Cavalry and Horse Artillery.....       | 935                      | 6  | 0  | 1093              | 2  | 0  |
| European Infantry .....                         | 715                      | 6  | 0  | 1093              | 2  | 0  |
| Native Infantry .....                           | 715                      | 6  | 0  | 1093              | 2  | 0  |
| <i>Surgeon-Major of 20 years' service.</i>      | 1013                     | 0  | 4  | 1113              | 9  | 7  |
| European Cavalry and Horse Artillery.....       | 935                      | 6  | 0  | 1056              | 9  | 7  |
| European Infantry .....                         | 715                      | 6  | 0  | 1056              | 9  | 7  |
| Native Infantry .....                           | 715                      | 6  | 0  | 1056              | 9  | 7  |
| <i>Surgeons of 15 years' service.</i>           | 1013                     | 0  | 4  | 915               | 11 | 5  |
| European Cavalry and Horse Artillery.....       | 935                      | 6  | 0  | 825               | 11 | 5  |
| European Infantry .....                         | 715                      | 6  | 0  | 825               | 11 | 5  |
| Native Infantry .....                           | 715                      | 6  | 0  | 825               | 11 | 5  |
| <i>Surgeons of 10 years' service.</i>           | 1013                     | 0  | 4  | 879               | 8  | 0  |
| European Cavalry and Horse Artillery.....       | 935                      | 6  | 0  | 789               | 3  | 0  |
| European Infantry .....                         | 715                      | 6  | 0  | 789               | 3  | 0  |
| Native Infantry .....                           | 715                      | 6  | 0  | 789               | 3  | 0  |
| <i>Assistant-Surgeons of 10 years' service.</i> | 565                      | 1  | 0  | 541               | 11 | 5  |
| European Cavalry and Horse Artillery.....       | 286                      | 10 | 0  | 451               | 14 | 5  |
| European Infantry .....                         | 565                      | 12 | 0  | 451               | 14 | 5  |
| Native Infantry .....                           | 565                      | 1  | 0  | 451               | 11 | 5  |
| <i>Assistant-Surgeons of 5 years' service.</i>  | 395                      | 1  | 0  | 365               | 12 | 2  |
| European Cavalry and Horse Artillery.....       | 286                      | 10 | 0  | 336               | 12 | 0  |
| European Infantry .....                         | 421                      | 19 | 0  | 336               | 12 | 2  |
| Native Infantry .....                           | 530                      | 1  | 0  | 336               | 12 | 2  |
| <i>Assistant-Surgeons under 5 years.</i>        | 395                      | 1  | 0  | 327               | 8  | 0  |
| European Cavalry and Horse Artillery.....       | 286                      | 10 | 0  | 317               | 8  | 0  |
| European Infantry .....                         | 421                      | 19 | 0  | 317               | 8  | 0  |
| Native Infantry .....                           | 530                      | 1  | 0  | 317               | 8  | 0  |
| Without charge on or on leave .....             | 256                      | 10 | 0  | 317               | 8  | 0  |

THE DRIED-UP HYDROPATHISTS. Hydropathy is in a hard case at Malvern. The old women are forced to take to brandy, on account of the great scarcity of water everywhere. The celebrated springs on the Malvern Hills are almost dried up, and water-drinkers find their pure beverage almost as costly as alcoholic drinks.

## Medical News.

APOTHECARIES' HALL. On August 25th, the following Licentiates were admitted:—

Colborne, Anthony Charles, Tachbrook Street, Belgrave Road  
Johnson, Joseph, Hogsthorpe, Lincolnshire  
Taylor, Shepherd Thomas, Argyle Square, St. Pancras  
Turner, Edwin, Hampstead

At the same Court, the following passed the first examination:—

Treves, William Knight, St. Thomas's Hospital  
Williams, John, University College Hospital

As an Assistant:—

Mildren, William Williams, Hayle, Cornwall

### APPOINTMENTS.

BRODIE, George, M.D., appointed Physician-Accoucheur to the St. George's and St. James's Dispensary.

ELLIS, Edward, M.D., elected Assistant-Physician to the North London Consumption Hospital.

\*FOSTER, Balthazar W., L.K. & Q.C.P.I., appointed Professor of Anatomy in Queen's College, Birmingham.

HARRIS, Samuel, Esq., appointed Honorary Surgeon to the Loughborough Dispensary.

KNOWLES, Henry, Esq., appointed Resident Surgeon to the Birmingham Lying-in Hospital.

MCGOWAN, Alexander T., L.R.C.P., elected Assistant-Physician to the North London Consumption Hospital.

### ARMY.

BAILEY, Staff-Assistant-Surgeon H. J., to be Assistant-Surgeon 53th Foot, vice W. Barry.

O'LOUGHLIN, Staff-Assistant-Surgeon J. E., to be Assistant-Surgeon 63rd Foot, vice A. T. McGowan.

### ROYAL NAVY.

BUTLER, Edward J., Esq., Assistant-Surgeon, to the *Caradoc*.

CRICKSHANK, John, Esq., Assistant-Surgeon, to the *Brisk*.

IRELAND, Arthur J., Esq., Assistant-Surgeon, to the *Caradoc*.

JACKSON, Gordon, Esq., Assistant-Surge., to the *Duke of Wellington*.

MOORE, George B., M.D., Surgeon, to the *Brisk*.

REDMOND, William, Esq., Assist.-Surgeon, to the *Royal Adelaide*.

### INDIAN ARMY.

CORRYN, Assistant-Surg. J. C., M.B., Bengal Army, to be Surgeon.

GOVAN, Assistant-Surgeon C. Moncrieff, M.D., Bengal Army, to be Surgeon.

TOWNSEND, Assistant-Surgeon S. C., Bengal Army, to be Surgeon.

VOLUNTEERS. (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

ATLAN, R. L., Esq., to be Assistant-Surgeon 1st Renfrewshire A.V.

FOWLER, J., Esq., to be Assistant-Surgeon 5th West Riding R.V.

PATON, J. F., M.D., to be Surgeon 1st Administrative Brigade Renfrewshire A.V.

### BIRTH.

SPINKS. On August 23rd, at Warrington, the wife of \*C. N. Spinks, Esq., of a daughter.

### DEATHS.

\*BERNARD, Charles Edward, M.D., at Weston-super-Mare, aged 54, on August 21.

COCKIN. On August 25th, at Dartmouth, the wife of John Cockin, Esq., Surgeon, R.N.

MARSH. On August 23rd, at Coed Cefn, near Monmouth, aged 73, Emma Catherine, wife of Thomas P. P. Marsh, M.D.

PERRIN, John W., Esq., Surgeon, at Walworth, on August 23.

SAUNDERS. On August 26th, in Queen Street, Chelmside, aged 3 months, Herbert W., youngest child of William S. Saunders, M.D.

ST. THOMAS'S HOSPITAL. Mr. Francis Hicks has been unanimously elected to the office of Treasurer of this hospital.

THE CROWN PRINCESS OF PRUSSIA. Sir Charles Locock has gone to Potsdam to attend the Princess, who is near the term of her confinement.

OVARIOTOMY. Dr. Tracy, Physician to the Lying-in Hospital at Melbourne, has successfully performed ovariectomy. This is, we believe, the first time the operation has been performed in Australia.

THE NEW HÔTEL DIEU is to be built to the north of Notre Dame. It will contain about eight hundred beds; each ward containing about thirty-six beds.

WORCESTERSHIRE NATURAL HISTORY SOCIETY. The annual meeting of this society was held on the 24th ult., at Worcester. On the motion of Sir Charles Hastings, president, the Bishop of Worcester took the chair. A lecture on the study of natural history, was delivered by Dr. Lankester. The Bishop of Worcester spoke of the connection between revealed religion and the natural sciences.

AMERICAN ITEMS. Professor Flint is about to publish a work on practical medicine. Professor Weber, of Cleveland, Ohio, is about to sail for Europe on business connected with the opening of a new school in that city. Professor Pope, of St. Louis, recently removed a foetal skeleton of extrauterine formation through the rectum, and the patient recovered. (*American Medical Times*.)

GUNSHOT-WOUND OF THE PENIS. In the number of the *American Medical Times* of March 19th, 1864, Surgeon S. W. Gross reports the case of a conical ball encysted in the right cavernous body of the penis. The ball was received at the battle of Shiloh, April 7th, 1862, and was found by Surgeon Gross lying about one inch from the pubes. A good deal of inflammation followed the injury, but at the end of two years it gave him no pain, and he could not be persuaded to have it removed.

THE ARMY MEDICAL SERVICE. No career ever so promising could be accepted unless the medical officer from the day of his joining his regiment, was in every respect in a position to which he was entitled by his superior education, his membership of a most honourable profession, and the very responsible and important duties of his post. The military element in the army has been permitted to assume quasi superiority over the "non-combatants"—an assumption ridiculously offensive and unjustifiable, especially in reference to the medical officers, whose personal courage is constantly taxed, and who frequently have to face death in the most loathsome forms of disease, when "combatants" are philandering about the streets of some idle garrison town. If we talk of bravery, few examples can be more admirable than the surgeon, with clear head and steady hand in the midst of the storm of fire, intent only on saving the lives of the men under his charge. (*Daily News*.)

BARON LARREY. A correspondent writes to a daily paper. The sum bequeathed to this illustrious surgeon by Napoleon was 100,000 francs, the largest legacy, I believe, contained in the Emperor's will. The monument at Tarbes, Larrey's birthplace, is not the only one erected to him by his country; a statue in bronze, by David d'Angers, the famous sculptor of those of Ambroise Paré and Bichat, cast from the cannon taken in the different great battles in which this heroic surgeon immortalised himself, was raised to his memory in Paris, by subscription; and Marshal Soult, Duke of Dalmatia, then Minister of War, decided upon its being erected in the *cour d'honneur*, the grand square, of the Hôpital du Val-de-Grâce. Larrey is represented in his uniform, pressing to his heart the will of Napoleon, on which is inscribed the high eulogium of the Emperor, "C'est le plus vertueux et le plus honnête homme que j'aie connu." Whilst attending the service at the Military Hospital during the three glorious days of July 1830, amongst other interesting incidents connected with those events, M. Larrey himself told me, when assisting him in dressing the wounds of one of the grenadiers of the Garde Royale, over whom he delighted at that moment to throw the protection of his popularity, that,

on the eve of some of the battles during the Empire, in which many of these very wounded had been engaged, he had frequently slept in the tent, wrapped in the same cloak, with Napoleon.

INDIAN MEDICAL WARRANT. The new Medical Warrant sent out by Sir Charles Wood has given great dissatisfaction throughout the service. It benefits all except surgeon-majors of twenty years' standing in this way—it makes their small pay smaller. It cuts down what was too little for the purposes of life before. The Indian medical service has been a very fine one; it will never reach the same standard again till it is fairly treated, and it may be well for Sir Charles Wood to look that fact fairly in the face. (*Times*.)

DR. BROWN-SÉQUARD. Tetanus is prevailing among the wounded of the Army of the Potomac to an unusual extent. Upwards of fifty cases occurred within a short period at Fredericksburg and in the hospitals at Washington; nearly every one of which proved rapidly fatal. We are glad to learn that Dr. Brown-Séquard of London, now in this country, has consented to give a lecture on this disease, at Washington, where it is most prevalent. The great experience of this eminent physiologist in the treatment of nervous affections will thus be made available to the army surgeons in the management of this obscure and fatal complication of gunshot wounds. The lecture will be immediately published for circulation in the army. (*American Medical Times*.)

HEALTH OF SCOTLAND. The Registrar-General of Scotland in his report for the second quarter of 1864, states that the death-rate in Scotland is on the increase, especially in the towns. It does not seem to depend on the prevalence of any particular epidemic, but there is an increased mortality from all diseases. It is not confined to the second quarter of this year, but has extended over several years. In his sixth annual report recently issued, he suggests a doubt whether the introduction of sinks and water-closets into the immediate vicinity of the apartments in which families live, and even into these apartments themselves, may not tend to vitiate the air by their emanations, and be a cause of disease and increased mortality.

CAUSES OF DEATH IN ENGLAND. Dr. W. Farr has just presented us with a statement on the causes of death in England for 1862. We learn from it that the continued fevers killed 18,721 of the people in the year. Upon the authority of the Fever Hospital, it may be taken that more than 17,000 of the people of England were destroyed every year in the ten years—1848-1857—by fever; and above 135,000 were severely wounded, but recovered. The whole 152,000 probably averaged about a month's sickness, so that the average fever population was about 12,700. They would fill 127 hospitals with 100 beds each, and require in every year about 4,600,000 days' subsistence. Scarletina was fatal in the year to 14,834 persons, which is nearly the average. The deaths by diphtheria were 9,587 in 1859, which was the centre of the epidemic, but had declined to 4,903 in 1862. Together these diseases—scarletina, sore-throat, and diphtheria—destroyed above 19,000 lives annually in the eight years 1855-62. The deaths from small-pox were 6,460 in 1858, and fell progressively to 1,623 in 1862; 12,272 persons died from hooping-cough in 1862; 11,112 died of diarrhoea. The deaths from ague and remittent fever are few, only 21 in a million living in 1862. Seventy-three people died of privation (starvation), 471 of delirium tremens, and 246 of intemperance in other forms. Parasitic diseases diminish with the progress of cleanliness. One hundred



and fifty-six persons, chiefly children, died of worms. There was only one death from hydrophobia in the year. In 1862 zymotic diseases carried off 4,551 in every thousand of the population. The second great class of diseases—constitutional diseases—were not far behind. Allowing for the increase of population, the proportion of deaths by cancer has steadily increased, while dropsy and mortification have declined, but this is partly due to improvements in medical diagnosis. Deaths which would have been returned under the head of dropsy are now traced to organic changes of the heart and kidneys. A common sequence is rheumatic fever, heart membranes injured, circulation obstructed, dropsy. But in the constitutional class of diseases phthisis (consumption) is the chief. The mortality by phthisis has fallen from 2,311 a year per thousand living in 1850-54, to 2,586 in 1858-62; but the deaths by bronchitis, with which in the chronic state phthisis is liable to be confounded, have increased more than the deaths by phthisis fell. Uniting the respiratory diseases with phthisis to get rid of any ambiguities of nomenclature, the mortality from the two groups of chest-disease is found increasing from 5,580 in a thousand of the population *per annum* in 1850-54 to 5,895 *per annum* in 1858-62, more than a quarter of all the deaths in England. It is a question of great interest, what has led to this recent increase of mortality from disease of the lungs. Of the 55,692 deaths in 1862 by diseases of the nervous system, 25,286 were from the convulsion of infancy. Bright's disease has increased greatly in the last ten years; but, perhaps, only in appearance, arising from a change due to the diffusion of pathological knowledge. Fatal stone-cases have decreased; but diseases arising from inflammation or irritation of the mucous membranes involved have grown more fatal; these are the evils to be obviated in using crushing instruments. A bold operation is now practised for ovarian dropsy, and Mr. Spencer Wells considers that 185 of the women who died in the year might have been saved by surgery. Six deaths in 1862 were ascribed to fright, 7 to grief, 1 to rage, and 44 to melancholy. In the fourth class of diseases—the developmental—the diseases incident to the birth, development, nutrition, and decay of man, were 68,842 deaths. The great majority of them were from debility and old age; but of all the 429,000 deaths in 1862, the causes of which are specified, only 26,780 were from old age. The deaths of women in becoming mothers (including metria) were 3,077 in 1862. In a series of these deaths from 1847 to 1862, the numbers commence with 60 deaths of mothers to 10,000 children born alive, and end with only 43. The violent deaths of the year were 14,944 in number, or 7.43 in every 10,000 persons. About one death in every 29 was by violence; but the bulk of them was the results of accident or negligence. The deaths by burns and scalds fell to 2,767. The accidental deaths by poison fell to 262. The suicides were 1,317, 611 of them by the rope; 17 persons were executed; 12 were killed by lightning.

**MEDICAL BIOGRAPHY.** Biographical sketches of distinguished living New York surgeons are now the order of the day in the *Philadelphia Medical Reporter*. The history of J. M. Carnochan is just given. He appears to be a wonderful operator. Amongst many other great things told of him we read: "In 1856 Dr. Carnochan performed his great, original, and truly wonderful operation. A patient, suffering from the most excruciating neuralgia, applied for relief. Death alone promised a respite from the full sized tortures chronically borne. Dr. Carnochan thought and acted. He cut down and removed the entire trunk of the second branch of the fifth pair of cranial nerves, mak-

ing slow and sure-footed progress from the infraorbital foramen to the foramen rotundum at the very base of the skull. I may venture to say that this has never been done by any other man, and many years will elapse ere another surgeon, though surcharged with an apoplexy of anatomical theories, will dare to leave the practical details of an earthly sphere and enter willingly the tufted chamber of the human mind. His manner is easy, affable, and courteous; while his personal appearance is intellectual, dignified, and eminently prepossessing. There is, however, an air of perfect self-possession on the eve of serious operations, which greatly inspires confidence.

**HIPPOPHAGY.** The hippophagists of Paris, headed by Baron Larrey and Geoffroy de St. Hilaire, have long desired to establish in this city butchers' shops where their favourite meat might be sold; but certain obstacles have hitherto prevented it. There are hopes, however, now that not only shall we have a horse butcher's shop in full operation, but also a horse restaurant. How much better you manage these things in England, where, for a few pence, you can obtain, both raw and cooked, sufficient horseflesh to satisfy the most inveterate horse-eater. By the way, what would be the proper English word for horse-meat? According to the rule enunciated by the famous Saxon etymologist, Wamba, it should be *cheval*, or some word derived from it. However, joking apart, I can personally testify that young horse is quite as succulent as young bull, and that old horse is infinitely more palatable and tender than old cow. (*Chemical News*.)

#### OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.  
TUESDAY....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
SATURDAY....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

#### MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Entomological Society.

#### TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

F. F.—We doubt whether medical officers in India had the right of presiding at Boards before the Warrant came out. An army medical officer, who was a long time in India, says: "We certainly had the right for a long time after the Warrant came out; but I don't know that we had before. While our right lasted, no one ever found any evil arise from it, and everything in my experience (and I was often President) worked smoothly."

**STATISTICS OF OVIARTOTOMY.**—SIR: My attention has been drawn to a statement of Mr. T. S. Wells, which appeared in No. 181, p. 167, of your JOURNAL, to the effect that he has performed the operation of ovariotomy 100 times, with 51 deaths. I presume this includes private as well as hospital cases.

The last summary of these cases conjointly, appeared in the *Medical Times and Gazette* of December 2nd, 1862. From the above date to that of July 16th, 1864, no cases of Mr. Wells, except hospital cases, have, so far as I know, been fully reported. As it is a matter of the greatest interest to the profession, that it should be able to judge of the relative mortality of the operation in private as well as in hospital practice, the cases being necessarily very differently selected, I would wish to ask Mr. Wells, through the pages of your JOURNAL, to favour us, with histories also of these private cases, as full as those he has thought well to give us of his hospital cases.

It was the want of these details, not formerly fully given by other and very eminent practitioners, which brought the operation, until within the last few years, both in these realms and on the continent, into such undesired disrepute.

In these days, when ovariotomy is so commonly performed, it is very desirable that those who operate should fully record all their cases. In this manner the profession, now become so eminently practical, will be enabled to come to conclusions on the merits of the operation, which, because both incontrovertible and philosophical, must command the respect of the entire scientific world.

I am, etc., C. H. F. ROUTH, M.D.

52, Montagu Square, August 1864.

**GRIFFIN TESTIMONIAL FUND.**—SIR: The following subscriptions have been further received on behalf of the above Fund:—R. Bryden, Esq. (Tiverton), 5s.; H. Stear, Esq. (Saffron Walden), 10s.; F. F. Walsh, Esq. (Saffron Walden), 10s.; G. D. Niven, Esq. (Clifton), £2 2; E. Richardson, Esq. (Whitechapel), 10s.

Amount previously announced, £53 3 6. Received at the *Lancet* office, £3 11. I am, etc., ROBERT FOWLER, M.D., Treasurer and Hon. Sec.

145, Bishopsgate Street Without, August 31st, 1864.

**COMMUNICATIONS** have been received from:—Mr. JONATHAN HURCHINSON; Mr. H. WILSON; Mr. R. ALFORD; Mr. GEORGE NAVLER; Mr. E. FISHER; Mr. S. WHITFORD; Dr. G. H. PHILLIPS; Mr. T. M. EVANS; Dr. THOMAS; Dr. EVANSON; Dr. HENRY GOODE; Mr. BINDLOSS; Dr. RANSOME; Dr. FOWLER; Mr. J. VOSE SOLOMON; Dr. J. W. GOODWIN; Dr. S. MARTYN; A. PROVINCIAL HOUSE-SURGEON; and Mr. L. HOLLAND.

#### BOOKS RECEIVED.

1. Exanthematous Diseases: their Rational Pathology and Successful Treatment. By John Pursell, M.D. London and Brighton: 1864.
2. Lunacy and Law: together with Hints on the Treatment of Idiots. By T. E. D. Byrne. London: 1864.
3. A Short Description of the Therma Romano-Britannica, or the Roman Baths found in Italy, Britain, France, Switzerland, etc. By R. Wollaston, M.D. London: 1864.
4. Photographs of the Diseases of the Skin. By A. D. Squire, M.B. No. 1. London: 1864.
5. Deutsche Zeitschrift für Medicin, etc. 1st and 2nd Heft. 1864.
6. Lehrbuch der Hebammenkunst. Von Dr. B. Schultze. 1864.
7. Hooper's Physician's Vade-Mecum. Seventh edition. By W. A. Guy, M.B., and J. Harley, M.D. London: 1864.
8. Address on the Origin and Early History of the Faculty of Physicians and Surgeons of Glasgow. By W. Wren, M.D. Glasgow: 1864.

#### ADVERTISEMENTS.

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# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

### ON THE ACTION OF ANÆSTHETICS; AND ON THE ADMINISTRATION OF CHLOROFORM.

By ARTHUR ERNEST SANSON, M.B.

MR. PRESIDENT AND GENTLEMEN,—In justice to you and to myself, I cannot commence this without endeavouring to guard you from a certain amount of disappointment. Every step in the investigation of this subject opens up such new ground, every point gained has so much to be confirmed and strengthened by collective and individual experience, that one dare not deal with the positive in the matter. Therefore, I must urge that you receive these observations, with all sins of omission, as links in a chain of evidence which has led me, for my part, to such and such conclusions; and, wherein I use what may seem to be dogmatical assertions, consider them only as possible lights towards a more certain Truth.

How much value attaches to the investigations of the Committee of the Royal Medical and Chirurgical Society on this subject, is evident to all. That they should be pushed forward by individual investigators is the expressed wish of the Committee; and it is to be believed that their labour will have its reward in a greatly increased enthusiasm in individual research.

In directing your attention to the action of chloroform and other anæsthetics, I wish to go to the farthest limit, and inquire, Upon what element of the organism is their operation first directed?

The early notions on the subject—and these are now the generally received ideas—were, that chloroform, ether, and the volatile anæsthetics exerted a primary action upon the brain and central nervous system. "It has been supposed that the anæsthetic is absorbed; that the general insensibility is the result of its contact with the nervous system. It exercises a sort of stupefying action on this system, for which it seems to have an affinity of election." So it determines the suspension of cerebral action. (*Arch. de Méd.*, 1858.) Flourens first showed this in the case of ether—how the centres of nerve-force lost their attributes in regular succession: first, the cerebral hemispheres theirs—the intellect; next, the cerebellum its power of coordination; thirdly, the spinal cord its conduction of sensation and motion; finally, if the action were continued, the medulla oblongata its power of continuing the functions of organic life.

This doctrine of the elective affinity of anæsthetics for the cerebro-spinal system is entirely embraced by MM. Lallemand, Perrin, and Duroy. They have established the fact that, after death from inhalation of the anæsthetic, a superabundant proportion of ether or chloroform is found in the brain and spinal cord; and therefore they argue, that (1) these accumulate therein, in virtue of a particular elective affinity; and (2) thus, and thus only, are they capable of abrogating the functions of these organs.

The last writer on this subject (Dr. Anstie) thus expresses himself on the active influence of chloroform: "Like alcohol, chloroform rapidly attacks the cerebral hemispheres."

Now, all these observations point to one assertion—one fact unquestioned by these observers: that the anæsthetic is absorbed; that (supposing it to be chloroform) it circulates as chloroform; that it chooses out the central nervous system in which to store itself up, and on which to exert its power.

A primary difficulty has been advanced to this theory by the observations of Messrs. Faure and Gosselin. The first of these experimenters exposed the brain of a dog, and poured chloroform thereupon; no diminution of sensibility followed. He divided the organ, and applied chloroform; still there was no symptom of narcosis. He removed portions of the brain of a narcotised animal; recovery from the somnolence occurred as in ordinary cases. M. Gosselin injected chloroform into the carotids, and failed to produce anæsthesia.

These experiments tended to show that chloroform, applied to, or circulating in, the brain merely as chloroform, fails to produce anæsthesia.

To some, therefore, this paradox of elective affinity has been the occasion of a deeper investigation. Snow, Nunneley, Richardson, Faure, Gosselin, and others, have advanced arguments which dispute the dictum, and point to a more universal cause for the phenomena of etherisation—a cause that acts,

"Not by partial, but by general laws."

The element of the organism to which these observers point, as the first acted upon by etherisation, is the blood.

It may be well to consider what first occurs in the production of anæsthesia by a volatile agent. First, a quantity of the vapour, commingled with atmospheric air, is breathed; that is to say, it is brought into contact with the six hundred million air-cells of the human lung. It is thus exposed to a vascular surface, the superficial extent of which has been estimated by Lindenau at not less than 2,642 square feet. In the process of inducing anæsthesia, fifteen or twenty cubic inches of the anæsthetic mixture, fifty or sixty times over, is brought into contact with this surface.

Obviously, it may do one of two things. It may be absorbed into the fluid part of the blood, be projected throughout the body, and manifest its effects by its direct action on the central parts of the nervous system; or it may act upon the blood, modifying its vitalisation—modifying that interchange of elements necessary to perfect life. It is not doubted that there are certain gaseous bodies capable of thus influencing hæmatosis, the action of which is precisely analogous to the other anæsthetic agents.

Inhalation of dilute carbonic acid gas causes all the phenomena of anæsthesia which are produced by inhalation of chloroform. The only differences observable are, that the effects are more fugitive, and the pulse and respiration are uninfluenced throughout the progress of the inhalation. (See Lallemand, Perrin, and Duroy, p. 406; Ozanam, *Arch. de Médecine*, 1858, p. 497; Herpin de Metz, *id.*, p. 627.)

Inhalation of carbonic oxide produces a similar train of symptoms, plus a greater degree of muscular agitation.

It is not doubted that the aspiration of these gases causes a direct influence upon hæmatosis, and thus produces the physiological effects due to them. Carbonic acid induces a degree of direct asphyxia, by loading the blood with that which, in the nature of things, it is its function to eliminate. Carbonic oxide acts directly upon the blood-globules. It poisons, says M. Claude Bernard, by preventing arterial

blood from becoming venous. Under its influence, the altered globules no longer absorb the gas in the midst of which they lie, nor yield up the gas which they inclose. One is led, then, to the question, Wherein are the differences of action between these and other volatile anæsthetics, such as ether, chloroform, etc.? Can a more unsatisfactory answer be made to this question than that of Lallemand, Perrin, and Duroy? (See p. 418.) These anæsthetics, they say, abolish, by their direct influence, the functions of the cerebro-spinal axis. Say they: "We have shown that they accumulate in the nervous centres in considerable proportion. It is, therefore, natural to admit that the impregnation of the nervous matter by these anæsthetics is the determining material cause of the progressive disturbances in the functions of the nervous system." Natural? It is very unnatural, that these bodies should have an ultimate action altogether different from those bodies with which they have so direct an analogy; that they should exert an affinity of choice, and store themselves up in the nervous system to produce their effects; that in their case the brain-poisoning should be primary, and the blood-poisoning secondary; whereas, in the cases of the other bodies, their conditions should be reversed. And all on what grounds? Merely because the liquid vaporisable anæsthetics are found in greater quantity in the brain after death than in other parts of the body—in the brain, whose soft substance gives the best conditions for the storing up of the fluid, wherein the conditions favourable to exosmosis are in their highest degree. Even this can be carried to a *reductio ad absurdum*; for in the liver is found the next large proportion of chloroform (a very considerable quantity). Changing the premises, would MM. Lallemand, Perrin, and Duroy attribute nervous power to the liver? Moreover, if it is by this soaking of the brain, as it were, with chloroform, that anæsthesia is accomplished, how is it that the effects of chloroform-narcosis so readily pass off?

Further analogy will show the insufficiency of reasoning whereby these gaseous agents have been forbidden the very name of anæsthetics—whereby these, whose action of abolishing sensation is so complete, have been said to be no anæsthetic agents, properly so called, but only pseudo-anæsthetics.

The similitude of the symptoms of induced anæsthesia with those of asphyxia is remarkable. Flourens, who was the first to trace the gradual action of ether upon the nervous centres, and who was very prominent in urging the affinity-to-cerebral-matter theory, gave it as his opinion, that it was impossible to see chloroform administered in a single instance without being struck with the resemblance of the phenomena to those of asphyxia. There is scarcely any scientific phenomenon more common than the production of anæsthesia under the causes of asphyxia. (Conf. Faure, *Arch. de Méd.*, 1858, p. 585.)

Anæsthesia and asphyxia are both phases in which the being is deprived of the special attributes of animal life, and left only with those of organic life. Going from effects to causes, we first take asphyxia. The primary cause is mal-oxygenation of the blood; the secondary effects reacting as causes of depression of the circulation and of the various energies of the body.

Accordingly, many labourers, who have the most patient investigations on their side, hold that the primary cause of the phenomena of narcosis is mal-oxygenation of the blood.

Nunneley believed that anæsthetics thus acted in virtue of the carbon which they contain; and their action was more powerful as their carbon was more abundant. But it must not be forgotten that nitrous

oxide and certain non-carbonised bodies are anæsthetic agents. Robin considered that chloroform and ether impeded the entrance of oxygen into the blood. Snow, in lectures published in the *London Medical Gazette* (1848-51), held this view; and the researches of Faure, Jackson, Richardson, and Harley, point to the same.

Both analogy, therefore, and observation show that the phenomena of narcosis are due, not to an especial influence exerted in the nervous system, but to the suppression of that action which the blood has normally upon the system. M. Faure says: "It is not an active phenomenon corresponding to a new state, but an altogether passive condition, resulting essentially from the suppression of the normal state."

Given, then, that anæsthetics, such as ether and chloroform, act by suspending the due oxygenation of blood, how do they effect this suspension? Obviously, either by acting upon the blood itself, or upon the structures through which oxygen passes into the blood. M. Faure adopted the view that the latter is the part acted on; that the alteration of hæmatose was due to the effect of the anæsthetic—an ecchymosing effect upon the mucous membrane of the lung. It is not my purpose to linger over any refutation of this theory. The abundant proofs of the absorption of chloroform, and the production of anæsthesia when injected under the skin or into the peritoneal cavity; the commonly observed fact that the lungs, after death from chloroform, do not show any congestion, but frequently a pallor; the consideration of how much these ecchymoses, if they occurred, would permanently compromise life—these and many other circumstances prove that the theory will not hold water.

The hypothesis that remains, and, in my estimation, the true one, is, that the action of chloroform, ether, and volatile narcotics is directly upon the blood.

No sign is more common in *post mortem* examinations after death from chloroform than darkness and fluidity of the blood. Dr. Taylor says, in his book on *Poisons*, "Probably the blood is directly poisoned by it."

When we have so many reasons for holding this view of the action of chloroform, etc., on the blood—reasons derived both from observation and from analogy—it does not invalidate our theory to be unable to prove the fact by physical demonstration. In a subject so near to the mysteries of life, the difficulties are immense.

Chloroform has the physical property of diminishing the power of the organic constituents of the blood to unite with oxygen, and to give off carbonic acid, even in the case of blood removed from the body. This has been proved by Dr. George Harley (*British and Foreign Med.-Chir. Review*, 1856, p. 429), who has shown that alcohol, ether, etc., do the same in different degrees.

Does the chloroform undergo a change in the blood? Dr. Jackson (*Boston Medical Journal*, March 28, 1861) has cited a case of death from chloroform, in the *post mortem* examination of which he found formic acid and chlorine, but no undecomposed chloroform. Here the chloroform had robbed the blood of its oxygen, and had become formic acid. On the other hand, there have been many cases in which chloroform has been to very large extent recovered from the blood. Hence, if there be this change, it must be a partial one.

I dare only give my impression of this ultimate fact, so difficult of proof; but, not without much observation, my conclusion is, that the main action of these volatile anæsthetics is on the cell-wall of the blood-corpuscle, on the proteinous envelope—a cer-



tain, it may be corrugating, indurating effect, whereby its capability of allowing the endosmosis of oxygen is impeded.

There is a delicate balance in the organism in a state of induced anæsthesia. On the one side is being, robbed of many of its attributes; on the other side is death. Compensatory oxygenation maintains the one, and insufficient oxygenation induces the other.

The first effect manifested in narcosis is upon the heart—an irritation of it. All narcotics show, as a first sign, increase in the frequency and force of heart-pulsations. This then becomes a derived as well as a direct action, dependent on a cerebral as well as on a cardiac cause. Of course, the circulation in the brain of an altered blood disturbs its molecular conditions; and hence all the mental phenomena of

narcosis. Hence also, in part, the depression of the circulation observed in a later stage of the course of narcosis; for Weber and Eckhardt have established that, while a slight irritation exalts the heart's action, a more intense irritation causes a more moderate action. The slowness and labour of the circulation in narcosis is probably due to two causes—1, the disturbed condition of the nutrition of the brain; 2, the congested state of the capillary system.

In conjunction with Dr. John Harley of King's College, I have been lately engaged in a series of experiments on the effect of various anæsthetic agents on the circulation, as evidenced in the appearances under the microscope of the web of a frog's foot.

I append a table containing a summary of the effects observed.

| Carbonic Acid Gas.  | Alcohol.   | Ether.   | Chloroform (dilute).   | Chloroform (concentrated).  |
|---|--|--|--|---|
| 1. Increased flow of blood.<br>2. Contraction of artery to two-thirds of its original size; soon afterwards, to one-half its size. Pallor of contained blood. Circulation rapid.  | 1. Increase of flow.<br>2. Contraction of artery. When strong vapour was given, either by current of air blown through alcohol, or by boiling the alcohol each time there was contraction of the artery and increased rapidity of the circulation. | 1. Increase of flow.<br>2. Contraction of the artery, persisting while frog is fully under the influence of the ether. On the injection of air into the mouth, dilatation to normal calibre. | 1. Increase of flow.<br>2. Contraction of artery to two-thirds of original size.   | 1. Increase of flow.<br>2. Sudden enfeeblement of circulation. Contraction of artery transient; frequently does not occur at all.   |
| 3. Sluggishness of capillary circulation. Change in appearance of many corpuscles. Aggregations of white corpuscles. Imperfect red corpuscles and living vein; a number of round corpuscles, apparently extruded nuclei. Capillaries apparently somewhat dilated. | 3. Paralysis of motion now shown. Circulation in capillaries became slow; ending in almost stasis. First, in capillaries near vein; secondly, in vein.   | 3. Strong vapour being administered, dilatation of artery to nearly twice its normal size occurred.  | 3. Capillary system congested.   | 3. Threatened stasis.   |
|   | 4. Complete anæsthesia. Artery contracted almost to obliteration.  | 4. Great retardation in capillary circulation. Capillaries dilated and loaded. Artery dilated to twice its normal size.  | 4. Dilatation of artery to normal size. Application of stronger chloroform vapour caused contraction of artery to two-thirds, afterwards to one-half. Afterwards dilatation as before. | 4. Artery dilated one-quarter more than its normal size. This persisted, and was unaffected by injection of air and any restorative means. The circulation in the capillaries was resumed, the artery continuing dilated, but without further exhibition of chloroform. The signs of stasis recurred. |
|   | 5. Profound anæsthesia. Artery became dilated.   | 5. Stasis.   | 6. Full anæsthesia. Arterial and capillary flow enfeebled; but regular and of fair force.  |   |

Briefly, therefore, the conclusions to which these experiments point are as follows.

*First.* In the case of all the anæsthetics employed—carbonic acid, ether, alcohol, and chloroform—there is at first increase of the flow of blood in the whole vascular system.

*Secondly.* The next sign is decided contraction of the arteries, the current maintaining its original force. In all cases, the capillary artery was measured, as to its breadth, by the micrometer.

In the case of carbonic acid, the artery may be reduced to half its original size; and, in the case of alcohol, the contraction may persist almost to obliteration. So, in the case of chloroform and ether, any re-exhibition of these vapours causes re-contraction; and only when concentrated chloroform vapour is employed, this contraction is reduced to a minimum, and often passes to the opposite extreme, dilatation. It is evident that contraction of the artery may persist throughout perfect anæsthesia; and dilatation of the artery is to be looked on as a sign of too profound an action.

These observations are wholly opposed to the view that Dr. Anstie takes in his book on the *Action of*

*Stimulants and Narcotics.* He considers that *paralysis of the sympathetic* is an early sign of narcotism.

*Thirdly.* Next in order is observed sluggishness in the flow of blood in the capillaries. In the case of chloroform, the corpuscles frequently show a tendency to aggregate and toil along in an irregular manner. Under the influence of respired carbonic acid, the corpuscles become very pale; agglomerations of white corpuscles seem to choke many of the capillaries; and the returning vein is loaded with imperfect oval corpuscles, and in large number white corpuscles (or extruded nuclei).

*Fourthly.* There is dilatation of the artery, and increasing sluggishness in the capillary flow, and stasis.

These stages are constant in the case of the other anæsthetics; but, in chloroform narcotism, their duration and relation vary with the strength of the vapour employed. If a very weak atmosphere of chloroform be inhaled, the contraction of the artery is prolonged, as in the case of alcohol; and an uniform, though enfeebled capillary flow, occurs even in advanced anæsthesia. If the inhaled vapour be strong, the stage of contraction is of very short dura-

tion; frequently, dilatation rapidly supervenes; and there is great embarrassment in the capillary circulation.

The essential concomitant, therefore, of a state of anæsthesia is sluggishness of circulation; but it is not a condition of hyperæmia of any organ. As, in sleep, Mr. Durham has pointed out that the brain is comparatively anæmic, and that the blood in its vessels is not only diminished in quantity, but also flows with a decreased rapidity; so in chloroform narcotism. A most interesting case has been recorded in the *American Journal of Medical Science* for October 1860, p. 400. Chloroform having been administered in a case of extensive fracture in the cranium, it is stated that, during the full effect of the narcotic, the brain was remarkably pale; and wherever the anæsthetic influence began to subside, the surface of the brain became florid and injected.

This failure of the circulation is the cardinal sign of danger in the administration of chloroform. Looking over fifty-one cases of death from chloroform, I find that thirty-eight first declared their danger by sudden stoppage of the pulse. In twenty-one cases collected by Dr. Anstie, in which alarming symptoms impended, but were averted, all but two commenced with pallor of countenance, or failure of pulse, or both combined.

As to the controversy which has existed with regard to the nature of death from chloroform, it seems to me that the differences may be easily arranged; and that those who assert that death occurs from apnoea, and those who attribute it to syncope, can both be right. Almost all observers are now agreed that, in the case of animals, the heart is the *ultimum moriens*. But then there are variations in the scale, according to the nature of the animal. A dog's heart is easily paralysed by chloroform; it contracts but a short time after cessation of respiration. The heart of a guinea-pig, although temporarily paralysed, will more readily resume rhythmical contraction. Going lower in the scale, we find that the heart of reptiles resists to almost any length of time the paralysing effect of chloroform. Hence, if there are those variations in the mode of death of animals, it is obvious that it would be unfair to say that the death in case of man is to be governed by a strict analogy with these. In nearly all the cases of death in the human subject, it is distinctly stated that the heart was the first to fail—a fact in direct variance with what is observed in the case of animals. Reverting to our first considerations, we may explain their apparent discrepancies.

The whole system is traversed by an imperfectly vitalised blood. What link in the chain of vital organs is the first to be snapped asunder, is determined by subtle causes—chiefly by the extent of automatic power of the heart. In animals whose heart beats with least dependence on the central nervous system, the heart is the last to succumb. In man, on the contrary, the heart, possessing little automatic power, yields first. This, too, in my mind, explains with a great deal of probability the comparative immunity of children from the fatal effects of chloroform narcosis. The inherent irritability of their heart is a resistance to the paralysing power of chloroform. In man, therefore, the most common cause of death is stoppage of the heart's action: not the universal cause, however, as in some cases (a very small proportion) respiration has been noticed to cease first. In these, then, have been found, in *post mortem* examination, engorgement of the lungs, and distension of the right chambers of the heart. In one marked case, occurring in France, the signs of death being evident signs of apnoea, the *post mortem* examination showed extensive tubercular disease

of the lung and engorgement. Here, evidently, the chloroform caused death primarily in the lungs.

Too much reliance cannot be placed on the results of *post mortem* examinations, especially in the human subject. The great cause militating against certainty is the fluidity of the blood. This fluidity is almost constant, and explains the tendency to hypostasis, and the appearance of congestion in any organ that may happen to be dependent.

There is not that constancy of signs after death in the case of man that we see in cases of the lower animals. Of forty-one cases wherein good reports of *post mortem* examinations were made, the right side was found containing dark blood in twenty-six instances. In eight cases, on the contrary, it was empty.

These facts, taken with the observed clinical fact that the pulse usually ceases first in cases of death from chloroform, tend to show—1. That death occurs in the human subject in a manner different from that in which it occurs in animals; 2. That it does not occur in the human subject in all instances in the same unvarying way.

In animals, death occurs by apnoea, and death begins in the brain.

In man, death occurs by syncope in most cases, by apnoea in a few; and death may commence in the brain, in the heart, or in the lungs.

In approaching the consideration of the means which should be employed to administer the vapour of chloroform, I must beg to revert to a few observations.

1. In all cases of experiment upon animals, the symptoms of narcosis have been induced in the most regular, uniform, and safe manner, wherein a freely diluted vapour has been administered.

2. In our experiments upon the condition of the circulation in narcosis, we have always found highly charged atmospheres cause great trouble of the capillary circulation; while diluted atmospheres have allowed, as it were, the gradual accommodation of the system to the new state.

3. When we have passed from a dilute to a concentrated atmosphere, the circulation has been carried on with far less irregularity than if the concentrated atmosphere had been breathed at the first.

4. We know, by practical experience, that an atmosphere strong in chloroform vapour causes in the human subject phenomena of resistance and the most transparent signs of danger; and we know, by an analogy with animals, that an atmosphere containing more than six per cent. of chloroform vapour is fatal.

5. But we know that, at the later stages of an inhalation, a proportion of chloroform can be breathed with ease, which proportion, in the early stages, would be irrespirable.

6. Every fact and every analogy tell us that we have to deal with a dangerous drug; and that, in our dealing with it, we cannot use too much caution.

I am constrained, on these grounds, though I do so with all respect, to express my antagonism with certain of the conclusions of that Committee which has just completed its labours.

First, I must express my variance with that expression which makes the use of positive means for the dilution of chloroform a matter of convenience only. Who can ensure the inspiration of an equable and certain atmosphere, when a napkin is used as a means for the administration of chloroform?

One cannot but be struck, at looking over a list of deaths of chloroform, with the few that occurred in cases wherein due mechanical means for the dilution of chloroform were employed. I have several times quoted Dr. Anstie in this paper; and, in quoting in this instance, I must cordially endorse his observa-



tions. In a total of 3,058 administrations, mechanical means for providing a due dilution of the chloroform vapour were employed in 2,200 cases. In the aggregate, twenty-one cases showed signs of impending danger. Only five of them were in cases in which the inhalers were employed. "But," says Dr. Anstie, "this significance is much increased in an analysis of the five cases in which alarming symptoms occurred during the use of an inhaler." In all these five cases, there was either a defective arrangement of the valve of an inhaler; or the symptoms of narcotism were pushed farther than was intended; or, though the inhalation of the chloroform vapour was commenced by means of the inhaler, it was continued by means of folded lint. The assurances of personal confidence in the anæsthetic are of little use here. "I have given chloroform ten thousand times," people say, "and have never had a case of death." The answer is, that your just proportions, judging from recorded cases, would be only about one death in twenty thousand cases. And this is far too much. Chloroform ought, in the nature of things, to be rendered absolutely safe.

It has seemed to me that the adage, "Familiarity breeds contempt," has never been more fairly applied than in the cases of chloroform. Our acquaintance with chloroform commenced with familiarity. It was so easily applied, and so perfectly accomplished the end in view—the mitigation of suffering. Confidence grew and grew, despite of the signs of its danger; and I fear that there are some cases of life sacrificed on the altar of convenience—convenience as to the means at hand to be employed, and as to the rapidity of accomplishing a purpose.

Having stated what I conceive to be danger, I must now state what I consider to be the best methods for insuring safety.

The inhalation of a definite weak atmosphere I have shown to be unproductive of danger. This can only be accomplished by means of Mr. Clover's or similar apparatus—a reservoir containing a mixture of about 2½ per cent. of chloroform with atmospheric air. Experience shows that by these means the advent of anæsthesia is rendered most regular; and alarming symptoms, the accidents of chloroform mal-administration, do not appear.

A second conclusion of the Committee I am disposed to call in question. They say that the danger of chloroform is in direct proportion to the quantity absorbed into the system. Now, as I have investigated this subject, I have found that a very great proportion of the deaths from chloroform occurred before complete anæsthesia was established—very many before the commencement of the operation for the performance of which the anæsthetic was administered. Quite the minority have been cases wherein deep anæsthesia has been induced. Patients do not die of a profound coma; the onset of fatal symptoms is rapid and early. The deaths have not been in cases where large quantities of chloroform have been inhaled; quite the contrary. Fifteen or twenty drops have proved fatal. (Dr. Warren, U. S.) In a case in which the vapour from thirty drops had been inhaled, the patient died in one minute. These things, with our own personal experience, have led us to the belief that the sudden influence of the chloroform vapour produces, as it were, a repudiation of it in this early state; and that our first object should be to induce a tolerance of the vapour. Reassurance, and the accustoming the patient to the peculiarity of the vapour, are first to be accomplished; and the early symptoms should be induced without the struggles and resistance which ensue when chloroform is given by the ready method. A gradual increase in the proportion of chloroform should then be

effected, until at last that proportion reaches 5 per cent., when this atmosphere will be as easily respired as the weaker.

There is thus no shock, no revulsion, but the gradual subdual of the vital forces—a gradual accommodation to the new state.

Hence I believe there are two principles of safety in the administration of chloroform. The first provides a constant inhalation of a definite and weak atmosphere; the second establishes by degrees a tolerance of the anæsthetic.

To provide for the gradual administration of chloroform, I constructed an inhaler which I now constantly use, and which I now submit to you—one which I believe to be portable and convenient, and which certainly provides for the gradual administration of chloroform. In the use of it I find the greatest apparent advantage; for there is no difficulty in persuading the patient to inhale. The symptoms occur quietly and uniformly; there is scarcely ever any muscular excitement at all, a mere tremor only indicating the muscular stage. Moreover, the little instrument is adapted to any position of the operator or patient.

To save the inconvenience of a long tube, the receptacle containing the chloroform is made capable of revolving; and the whole is made to revolve upon the face-piece; so that an universal joint is provided.

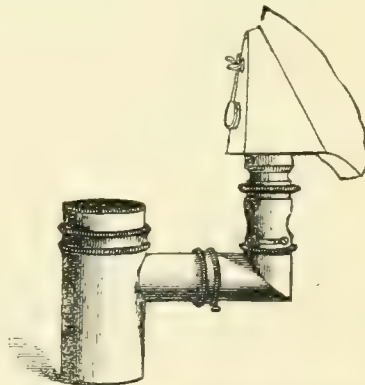


Fig. 1.—Inhaler: for use in Sitting Position.

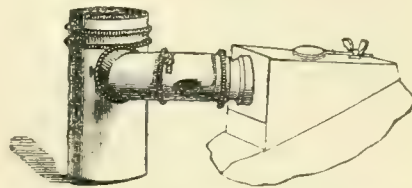


Fig. 2.—Inhaler: for use in Recumbent Position.

The chloroform is received in the cylinder, which is well supplied with blotting-paper. Previous to inhalation, the efferent tube is so arranged as to present two large apertures for the admission of air; and the aperture of the face-piece is uncovered by the valve. After a few inspirations in this condition, there being such free and direct dilution with air that the discomfort of the presence of chloroform is scarcely perceived, the apertures for the admission of air into the tube proceeding from the chloroform-chamber are partially closed; this being accomplished by turning the outer tube of the two which constitute the channel. This outer is again turned, till the side-current of air is quite cut off. Then

the valve of the face-piece is used still further to cut off the admission; and the air passes only over the chloroform-impregnated surface.\*

The rest, Mr. President and gentlemen, I leave to the opinions which these observations shall evolve from you. I have brought before you little that is new; but all faults of want of originality and insufficiency of reasoning will, I hope, be atoned for by the importance of the subject, and by the opportunity of eliciting the opinions of this great chloroform committee—the British Medical Association.

## ON THE PHYSIOLOGICAL MEANING OF INFRAMAMMARY PAIN.

By S. MARTYN, M.D., M.R.C.P., Physician to the General Hospital; Physiological Lecturer in the School of Medicine, Bristol.

IF we recall to our minds what has of late been done for the *Physiology of the Nervous System*, and the labours represented by the voluminous essays of our friends and contemporaries (I need not mention names), how evident does it become that a revolution is taking place in many of our prevalent ideas; new groups of symptoms must be connected with well known lesions, and *vice versa*; while a revision of all remedial treatment must follow in the wake of newly demonstrated causal connections. But life is short; and the registration of nervous manifestations for inductive reasoning necessarily very long. Till some hypothesis has been set up, this registration cannot even begin; and thus it is that, while time flies, vast opportunities of noting these diseases afforded by our hospitals and infirmaries are apt to be lost.

It is with a view to contribute something to this developing insight, that I have thrown together the following brief remarks.

I wish to advance a theory for one of the most frequent, intractable, and mysterious nervous affections with which we have to do: that particular pain in the side, known as "inframammary pain." The disease is distinct enough in its leading symptoms, and its literature is extensive; so much so, that time would not allow me to attempt a *resumé* of it in this place. I have, however, gone carefully over what has been said, and taken into account the arguments on various sides, besides retaining notes of very numerous cases in my own practice.

My definition of the affection to which I am alluding would be this: *Pain*, very common, either continuous or intermitting irregularly, and brought on by movement. *Sex*, more frequent in women (as 20:5). *Locality*, superficial, and confined to spots in the sixth, seventh, and eighth intercostal spaces, those oftenest affected being inframammary, the next in frequency near the spinal or sternal end of those intercostal spaces. *Side affected*, mostly the left (13:7, Valleix), sometimes both. *Temperament*, the nervous. *Duration*, indeterminate, according to Hasse, often through other diseases till death.

It is not a rheumatic pleurodynia; for the pain is not so violent nor so diffuse, nor is there a febrile state. It is not dry pleurisy nor angina; for the breathing is free, and the lung-sounds are normal. It is not meningitis of the cord, nor softening, nor caries of vertebrae; for from all these a diagnosis may readily be made. It is a *true intercostal neuralgia*. Not to go further into detailed description of a state which these points will suffice to identify, it was the entire absence of a satisfactory proximate cause assigned for

this pain that led me to look over my cases, and review the subject more closely.

I may here allude to what I think is the most recent discussion of this topic, and which is contained in the volume of the *BRITISH MEDICAL JOURNAL* for 1858. The controversy lasted through the year, and the variety of new theories proposed, or old ones defended, shows clearly enough the difficulty surrounding the subject. In this discussion, the opinion first in point of time was Dr. Inman's, that the pain is a true "myalgia," the exponent of fatigue or malnutrition, and successfully treated by a generous diet. Next comes a paper by the late Dr. Charles Coote, read before the Harveian Society, in which he divides the affection into classes, combats the myalgic theory on the ground that it affords no explanation of the localisation, throws over "spinal irritation" as meaningless, "uterine irritation" as illogical, because this pain occurs in men, and finally reverts, himself, to Henle's pressure theory. This theory is, that the left inframammary region must be specially liable to venous congestion, from the anatomical fact that its veins run into the azygos; so that, if the azygos happen to be obstructed, the veins would be over-filled. On this Dr. Coote very aptly remarks that there is one link wanting, viz., "some proof that in these cases vascular disturbance exists." He might have added that there is no proof or even likelihood that simple venous congestion could produce the acute pain of intercostal neuralgia.

Dr. Coote's own theory was very ingenious; he held that the vaso-motor nerves of the whole body were disordered, causing irregular contraction and dilatation of the minute arteries; this occasioned various mischief, and, in the left inframammary region, being combined *there* with the tendency to congestion (of Henle), produced intercostal neuralgia. I regret that amongst so much that is valuable in the admirable paper by Dr. C. Coote, this, the last link, should be so weak, that I think he would himself scarcely have continued to maintain it. It would not be difficult to show that such a theory is improbable; but what we ask for, first, is *some* proof in its support, or some explanation of the formula that systemic vaso-motor derangement, *plus* this hypothetical venous congestion, are equal to the production of circumscribed neuralgia! To return to the discussion of 1858, no new theory besides these was advanced, except that Mr. Holmes Coote pointed out the frequency of inframammary pain as a sign of commencing lateral curvature.

Dr. Fuller, however, after pointing out the errors of various explanations, gave so graphic an account of an attack he himself experienced, that I cannot forbear quoting it. "It first attacked me in the month of June, when I was thoroughly exhausted by incessant work at my profession, and enervated from want of active out-door exercise. At that time it did not annoy me much, and I felt it chiefly after I had been sitting long in one posture, as in writing; but gradually it increased in intensity, and was rarely absent, except when I was in a recumbent position. I was unable to stoop without much pain, and quite unable to lie on my left side, so acute did the pain become when I attempted to do so. . . . It was accompanied, when severe, by superficial tenderness, so acute as to be aggravated by the slightest pressure, and though the pain seemed to pervade a considerable portion of the inframammary region, the tenderness rarely covered, at any one time, a space much larger than a shilling. On August 26th, being thoroughly 'out of condition,' I went for three weeks to Scotland, where I hoped to walk off my troublesome enemy; but the fatigue of walking the moors and carrying my gun increased the pain rather than diminished it. My

\* The instrument is used by Matthews of Portland Street.



health, however, improved vastly, and to my great joy, the pain disappeared within a week after my return to town life and bodily repose. In common with every other member of our profession, I have met with numberless instances of this form of inframammary pain. . . . I felt then, as I do now, an inability to account for its attacking the left inframammary region in preference to any other part of the body." This is Dr. Fuller's account, as a pendant to which I may add, that I have myself suffered from this pain so severely as to be unable to move in the morning, for many successive days, before the use of a mustard plaster.

Now, in the cases under my own observation, I have found two conditions which seem never to be absent: the one, a state of general muscular weakness; the other, increased rapidity of the heart's action, except when the lowest amount of propulsive force is required, as in perfect repose of body and mind, when the pulse is often abnormally slow. Of these two points, the disordered action of the heart was the one which attracted my attention; and though I am aware that Professor Valleix, in his essay on dorso-intercostal neuralgia, does not allow any peculiarity of the pulse, I have satisfied myself by all subsequent observation of my correctness on this point. In cases of intercostal neuralgia, it will be found that there is palpitation on any exertion, and that in most cases the pain and the palpitation have a distinct connection. The question was this: Why is pain almost invariably confined to the sixth, seventh, and eighth intercostal spaces of the left side? The answer seemed to be—a relation to the heart.

Reflected or radiated pain is now recognised as extremely common. In cases of sensory nerves entering a great centre at the same spot, if the peripheral end of one be irritated, we feel pain in, or refer it also to, the periphery of the other. The irritation brought by the phrenic from the diaphragmatic pleura is referred to the end of the supra-acromial branches of the cervical plexus; uterine irritation is referred to the cutaneous region of the sacrum; and so on in other instances. The question thus arose, are there any nerves supplied to the heart and to the sixth, seventh, and eighth intercostal spaces from the same central region? and then there appeared a most important anatomical relation to be taken into account. The aortic arch impinges on the left side of the third dorsal vertebra; and opposite the fourth, fifth, and sixth, it receives contributions to its plexus from the corresponding ganglia of the sympathetic, while its plexus again contributes to the heart. These sympathetic ganglia have, however, just received branches from the intercostal nerves themselves; and so it is that the heart and the intercostal spaces (four, five, six) are supplied by branches of the same nerves. Moreover, this is on the left side and above only, for on the other side, most of these branches go to the œsophagus, while below, those from the sixth ganglion chiefly go to form the splanchnic nerves. Now the fourth, fifth, and sixth intercostal nerves are those which give off large lateral cutaneous branches, descending over two ribs before they terminate in the skin over the sixth, seventh, and eighth intercostal spaces, or the site of inframammary pain. Smaller twigs of the same nerves supply the ends of the same intercostal spaces, where the pain may also be perceived.

I had made up my mind as to this nervous circuit, but felt the great difficulty in attaching any particular importance to the first few dorsal spinal fibres supplied to the heart, when the researches of Von Bezold, in 1862, seemed to throw light upon this point. I have not repeated his vivisections, but he has done so himself a great number of times, and I think some

importance may be attached to his conclusions. Von Bezold poisoned rabbits with *curare* to get rid of irritability of voluntary muscles; then, the sympathetic and pneumogastric nerves in the neck having been all carefully divided, artificial respiration was kept up. When the spinal cord had been divided at the seventh cervical vertebra, irritation of its distal end produced violent increase of the heart's movements, while irritation of its proximal end did not. This was one of a series of experiments which led him to the conclusion that the chief motor centre for the heart in relation to sensation and psychical impression, and one which contributes three-fourths of the motor impulse, is in the medulla oblongata. From this centre the fibres do not pass down to the heart through the vagi or sympathetics in the neck, but through the cord. Emerging from the cord near the upper part of the dorsal region, these nerves pass to the base of the heart, through the sympathetics, and with contributions possibly from ganglia below.

Thus the anatomical nervous connection between the heart and the region of inframammary pain became endowed with a great significance, and it seemed more than ever probable that the sensorium received the impression of *some distress* in the heart through nerves which enter the grey posterior columns of the cord at the same point as those from the sixth, seventh, and eighth intercostal spaces. The central impression is radiated, and referred by the mind to the sensitive skin, according to the laws of reflection.

In the case of aneurism of the descending portion of the aortic arch, the same nervous circuit accounts for the pain in the side, which is indeed a more aggravated form of inframammary pain. In severe instances of intercostal neuralgia, painful spots are also to be found near the sternum and spine, at peripheral ends of cutaneous nerves, and even in the arm, which, through intercosto-humeral branches, receives also sensory nerves from the same source. In these and other ways, I think the theory here laid down explains the actual phenomena. For instance, the pain may be (though always to a much less extent) felt on the right side also. Now, although the first internal dorsal branches of the sympathetic on the right side go to the œsophagus, some of them do run on from it, and under it, to the aortic arch. Again, though the sixth, seventh, and eighth intercostal spaces form the habitat of this pain, it may be felt in the fifth and in the ninth also, this being readily accounted for by the delicate and very irregular filaments which run from the first and second dorsal ganglia, as well as from the great variations in the mode by which the dorsal sympathetics form the great splanchnic. So far, then I believe there is some reason, on anatomical, physiological, experimental, and pathological grounds, for adopting this theory: that *inframammary pain is a reflex neuralgia expressive of some distress in the heart*.

In our present extremely limited knowledge of cardiac innervation, I am scarcely prepared to support strongly any further conjectures as to what the exact nature of this cardiac distress may be. My own view is that it belongs to the cases of partial reflex paralysis, and that this is the reason why general muscular debility is its concomitant. Although the heart possesses nerve-centres of its own, we have seen that there is some ground for thinking that its action is regulated by the vaso-motor system through the cervical sympathetic and the vagi, while the great direct motor stimulus of mental and sensational acts, goes to it from the medulla oblongata. If the proposition be true, that (as Brown-Séquard tersely puts it), "almost all parts of the body may be affected with paralysis in consequence of an outside excitation", why should not the heart be placed under a list which includes

the "arm, hand, face, eyes, neck, trunk, pharynx, cesophagus, bladder, etc."?

Let me illustrate this hypothesis by an example. Nothing is more common than inframammary pain on exertion, in cases of leucorrhœa. Now, no one denies the great influence on the nervous system of irritation in the cervix uteri or neighbouring parts, these effects extending to the encephalon itself. There is nervo-muscular fatigue of the whole system, and the pulse becomes irregular as well as quick, especially when inframammary pain is, or has been present. But a quick pulse here means a weak heart, unable to produce sufficient propulsion in the normal time. This weakness is not defective nutrition, for it occurs frequently in the well fed and luxurious. May it not be a neurosis expressing the exhaustion of a centre (in the medulla oblongata) by continued irritation (uterine nerves)? Dr. Fuller's case, as another type, would be explained by a similar temporary exhaustion of the nerve-centre for cardiac action by a worried brain, the muscular build of the heart perhaps predisposing it to be overworked.

In conclusion, as to the treatment which we should expect to answer if our theory be true; this must remove the *source of irritation, relieve the heart of its overwork, and allay the pain.* Now, to allay the pain for a time is not difficult; counterirritants or simple plasters will do so, blisters, small and numerous, have been much used, and I have been satisfied with aconite and belladonna, especially the admirable linimenta of the new *Pharmacopœia*. The next indication is to relieve the heart, for which, of course, repose in the horizontal position answers best, for the time causing the pain to disappear. The Turkish bath, for obvious reasons, acts in this direction. But the great point is to seek for a permanent cause; for though much may be done by direct spinal stimulants, as strychnia or cold bathing, etc., no ultimate good will result, except exhausting nerve-irritation be removed. Cure the gastric or uterine irritation, the leucorrhœa or the hæmorrhoids, give repose to the fatigued spinal cord or worried brain; and *pari passu*, as the heart's action improves, and is no longer too slow in repose, and too quick during muscular or mental exertion, so will there result a corresponding diminution of the inframammary pain.

**AN APOLOGY.** The absence of the editor from home for most of the time during the past month we trust will be accepted as an excuse for whatever has been lacking during that time, particularly in the editorial department. He is "lengthening his cords and strengthening his stakes" in view of the commencement of the new volume in July, when some important changes, much to the advantage of subscribers and the profession, will be announced. (*Philadelphia Med. and Surg. Reporter.*)

**WAR CIRCULARS.** When prisoners are seriously ill, their nearest relatives, being loyal, may be permitted to make them short visits; but under no other circumstances will visitors be admitted without the authority of the Commissary General of Prisoners. Upon the death of a soldier in this military department (Ohio), whether in hospital or in the field, the chaplain, wherever one is on duty, and in all other cases the surgeon, is instructed, whenever practicable, to cause the name, rank, company, regiment, age, date, and cause of death, last place of residence, and any other items deemed of importance relating to the deceased, to be legibly written upon white paper, with ink, and to place this record in a bottle, to be well corked, and deposited in the coffin, at the foot of the body, before burial. (*American Medical Times.*)

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE CURE OF GLAUCOMA WITHOUT OPERATION.

Under the care of J. V. SOLOMON, F.R.C.S.

**CASE I.** *Incipient Glaucoma cured by Medicines.* Mrs. H., aged 38, married, an artificial flower (black crape) maker, was admitted March 8th, 1864.

For the last six months, she had noticed a red ring round the flame of a candle. When at work, her sight sometimes gave way, and returned after closing the eyelids. If she read, the lines of print (not the letters) almost immediately ran into one another. The smallest type she could read was small pica (Jaeger's No. 8). There was almost constant dull heavy pain in the forehead. There was no photopsia. The pupils were not dilated, but sluggish. The iris presented a normal plane. The choroid veins on the surface of each sclerotic were numerous and much enlarged. The tension of the right eye, which was the worst, was augmented (T+1); that of the left T+? The temporal and nasal field of vision was contracted; the vertical field being normal. There was no cupping of the optic nerve-entrances (discs); the venous systems of the retina and choroid were much congested.

℞ Liq. hydrargyri bichloridi ʒiiss; tincturæ ferri sesquichlor. ʒij; tincturæ conii ʒiv; infusi quassia ad ʒviij. M. Sumat ʒj ter die statim post pastum.

Sumat pil. aloës cum myrrhâ ʒss alternis noctibus. Mitte doses iii.

The eyes were ordered to be rested.

On the eighteenth day of this treatment, the tension in both eyes was normal. It had been distinctly augmented in the left, as well as the right, after the first visit. The zone around the candle-flame had disappeared. The field of vision was enlarged. She could read five or six lines of No. 8 without apparent coalescence of the lines. The mercury was now discontinued, and a mild aperient and alkaline bitter mixture taken by the patient.

On the thirty-third day of the treatment (April 15th), the patient could read pearl type (No. 2), and forty-eight lines of small pica without experiencing confusion. The veins on the sclerotica were diminished much in size and number. Tension was normal, and the field of vision nearly so.

May 4th. She considered her eye to be quite well; the sclerotica were of good colour and bright in both eyes. They were free from vascularity, except at two or three limited points in the right, in which were some old varicosities (muscular veins), which had a flattened appearance. Tension was normal.

This patient is *embonpoint*, of florid complexion, good general health, and of hopeful disposition. So soon as her complexion began to pale, the bichloride was discontinued. She has never worn spectacles, nor been affected with presbyopia or intercurrent obscurations.

I claim this case to be of the nature which I have designated it, because there were present, increased tension; contraction of the field of vision; a halo around a candle-flame; congestion of the anterior



iliary and muscular veins; and impaired vision; with a dull heavy pain in the forehead.

Under a treatment purely medical and hygienic, the whole of the symptoms have been subdued.

**CASE II. Glaucoma; Complete Loss of Sight of the Right Eye: Reduction of Tension and Recovery of Vision from a purely Medical Treatment; Iridescent Vision in the Left, with Normal Field, and Acuteness of Vision.** A young lady, single, aged 19, of excellent general health, who had recently experienced some anxiety of mind, was seized with aching pain in the right brow and side of the head, accompanied by dimness of vision of the right eye, which gradually ended in blindness.

In seven days from the commencement of the disease (Oct. 6th, 1863), I was consulted. The vision at this time was abolished, so that the brightest light failed to impress the retina. The pupil was slightly dilated and motionless. The globe, which was devoid of congestion, was very tense (T 2). The fundus of the eye was clouded; the retinal vessels were not enlarged, and could be traced only a very short distance over the choroid; they were curved abruptly at the margin of the optic disc. The patient, a very intelligent girl, had never experienced iridescent vision. The tension of the left eye was slightly augmented (T 1—1½); but, with this exception, and the presence of iridescent vision, which commenced at the onset of the attack in the right, the organ was perfectly normal in all respects. Its accommodation for brilliant type, its field of vision, and ability to bear fatigue, and the condition of the fundus, were healthy.

I directed four leeches to be applied to the right lower eyelid; and a blister to the nape of the neck, which was to be kept open; also perfect rest of the eyes, in a moderated light. Internally, mercury was given in two forms. The bichloride of mercury, with tincture of sesquichloride of iron, in a mixture, and grey powder in combination with henbane, as a pill, and a diet of milk and beef-tea, were ordered.

On the 8th, shadows were perceptible.

On the 10th, the retinal artery, where it lies on the optic disc, appeared to be empty, without any pressure by the finger.

On the 12th, features could be discerned, but not with anything like distinctness. The mouth became sore, and the depression which commonly attends that state manifest; for the relief of which, sherry negus was added to the diet, and the quantity of mercury diminished.

On October 31st, the twenty-fifth day of the treatment, the patient read two-line great primer (Jaeger's No. 16).

On November 6th, great primer (No. 12) was read.

On December 16th, the sixth week of treatment, the pupil was more dilated than normal. I therefore applied a small bit of Calabar bean paper; the contraction from which being excessive (myosis), I placed a concave glass of 48" positive focus before the eye, and the patient read brilliant type (Jaeger's No. 1) with facility.

This young lady resided nine miles from Birmingham; consequently, I saw her only two or three times in eight or nine days. The family practitioner, Mr. Haden of Sedgley, most kindly carried out my views in the intervals. On two or three occasions previously to the vision becoming distinct, I found the progress of the case arrested, and the tension greater than at my last visit. This condition was met by the application of a single leech to the lower lid, which had the effect of putting in motion the powers of repair.

As the vision and tension gradually improved, the patient became sensible of the presence of iridisation

in the right as well as in the left eye. For a time, the nasal field of vision was abolished, there being good perception of large objects on the temporal side.

The group of symptoms upon which I based my opinion, that the preceding case was one of glaucoma, were, the blindness, the augmented tension, and the cupping of the optic nerve-entrance. The presence of iridisation in the companion organ from the first onset of the disease, and its occurrence in the one first affected so soon as the retina began to recover its power of receiving impressions from external objects, together with the abolition of the nasal field of vision, afforded confirmatory evidence, had such been needed, in order to make the diagnosis clear. In proportion as we obtain our information from clinical sources—from the book of nature—so do we find how comparatively rare are typical portraits of disease, as given in our manuals and handbooks, to be met with in practice. In this instance, for example, the disorder was not preceded by far-sightedness (presbyopia). The external veins of the choroid were not congested, and the retinal veins were not gorged; nor did the artery present that rare and beautiful phenomenon—spontaneous pulsation. Moreover, iridisation, or the appearance of a rainbow or halo round the flame of a candle, instead of preceding, followed the blindness.

[To be continued.]

## Transactions of Branches.

### BENGAL BRANCH.

#### A CASE OF AMYLOID DEGENERATION.

Under the care of S. G. CHUCKERBUTTY, M.D.

[Read by his Assistant, RAJGOVIND CHUNDER DUTT, May 10th, 1864.]

BUCKTOO, a Mohammedan, aged 25 years, was admitted into the Calcutta Medical College Hospital, on April 19th, 1864, in a state of great prostration, with a pulse feeble and frequent; tongue moist, but covered with a thin fur in the centre; skin cool; conjunctivæ pale; abdomen distended with fluid, fluctuating; lower extremities anasarcaous; upper swollen to a less extent; hepatic dulness smaller than natural; splenic slightly increased; respiration difficult; pain on pressure over the spleen.

On inquiry, he stated that he had been suffering from fever, off and on, for the last eight months; the present attack having commenced about a month ago. The fever came on about midday, and did not go off till about midnight.

April 20th. He had had only one stool since admission. There was no fever; his appetite was bad; he was thirsty; tongue moist. There was marked fluctuation in the abdominal cavity. The dulness of the percussion-note over the heart was increased in area; but there was no visible fluctuation, though the heart-sounds were weak. The tongue was pale, and its papillæ enlarged; the sclerotic conjunctiva was slightly yellow.

April 21st. He had no stool during the last twenty-four hours. The urine was said to be scanty. (The clinical clerk had failed to examine its character.) He did not sleep in the night, and complained of much pain in the epigastric region. There was no fever; pulse feeble and frequent.

April 22nd. He had one stool without a purgative, and some more from a dose of castor-oil. The pain in the abdomen had diminished. His urine was passed in the bed-clothes.

April 23rd. He had two stools. Debility was increasing. He passed his urine in the bed-clothes.

April 24th. He felt very weak; had two stools this morning.

April 25th. He had no stool. There was no fever. He vomited once in the morning, a thin greenish-yellow fluid; pulse exceedingly feeble, being barely perceptible at the wrist.

In a few minutes after this, he expired quietly.

POST MORTEM EXAMINATION, two hours after death. On opening the chest, the right lung was found to adhere to the ribs by old cellular membrane. On opening the sac of the pericardium, it was found to contain about two ounces of a reddish fluid; and its inner surface was marked with red points. The heart itself was rather small; but its walls were muscular and of a good colour. On opening the abdomen, it was found filled with a very large amount of fluid, measuring about nine imperial pints, of muddy colour and opaque, and containing a quantity of whitish flakes swimming about the bottom of the pelvis. The peritoneum, both parietal and intestinal, was covered with punctiform injection. There was no agglutination of the coils of the intestines, no adhesion of any organs; but a mass of enlarged lymphatic glands, as large as a hen's egg, was seen projecting into the abdominal cavity about the right inguinal region, which, on being followed downwards, appeared to be only the upper part of a much larger mass passing down to the cribriform fascia, and composed of many enlarged and agglutinated glands. On cutting into one of these glands, the divided surface looked granular, with transparent waxy patches scattered pretty densely over it. On the application of a solution of iodine to one of these waxy patches, they become of a deep yellowish brown colour; whereas, the surrounding substance and the capsule turned only yellow. On the application of sulphuric acid immediately after the iodine, the patches assumed a temporary violet or bluish colour. With the sulphuric acid alone, they underwent no change. Similar masses of lymphatic glands were found at the left groin; and the left thigh, below Poupart's ligament, was affected in the same manner. The liver was only eight inches in length and four in breadth; its colour, as seen through the capsule, was mottled, livid, and light yellow, in irregular patches. Its section was translucent and dull, with waxy patches of varying sizes scattered through the surface. The substance was tough; little or no blood issued from its vessels, except when the larger ones near the transverse fissure were cut. On submitting the section to inspection with a magnifying glass, patches were observed, some of which were uniformly waxy, with a yellow border; but the majority were pink in the centre, enclosed within a broad waxy zone, external to which there was a yellow zone. On touching these waxy patches with the solution of iodine, they assumed a yellowish-brown colour, which changed into bluish on the application of sulphuric acid. The mesentery of the small intestines, more opaque than usual, and thick, was dotted on the surface with roundish opaque waxy spots, of the size of white mustard-seeds, which stopped suddenly at its junction with the intestine, where there was a broad transparent bluish line separating the one from the other. Iodine added alone to these waxy patches made them slightly yellowish. Sulphuric acid alone only charred; but, added where the iodine was previously applied, immediately caused a violet tint. The kidneys were of about the usual size, rather indurated, and granular on section. The granules were of a light colour, as seen through a magnifying-glass; but not all over. The lungs were healthy. The spleen was a little larger than usual, tough, with the tuber-

culæ unusually distinct and hypertrophied; the surface, on section, was dotted with waxy spots. A bit of the waxy matter of the lymphatic glands, under the microscope, presented cells of different sizes, enclosing several nuclei and nucleoli; and having an irregular appearance of striation in some cases, in others looking like almond-seeds. A bit from one of the kidneys presented one or two cells with concentric layers and ordinary epithelial cells. On further examining the bodies under the microscope in the chemical laboratory, Kanny Loll Dey found objects which closely resembled the arrow-root starch-corpuscles; but this was after the morbid products had been kept in spirit and water for some days.

## British Medical Journal.

SATURDAY, SEPTEMBER 10TH, 1864.

### MR. CARTER AND THE MEDICAL PROVIDENT FUND.

MR. ROBERT BRUDENELL CARTER has issued a most indiscreet document concerning the *Medical Provident Fund*. The last person to publish such a paper should have been Mr. Carter, he having been elected, at the Bristol meeting, a member of the preliminary Committee; having had his opinions on a point in which he differed from his colleagues fairly placed, along with the Report, before the Association at the Cambridge meeting; and being finally, by what every one must acknowledge as a graceful and honourable act, elected by the Committee of Council a Director of the Fund—and this on the very day on which he issued his manifesto! To throw, or attempt to throw, an apple of discord into the Society, at the moment of its projection, is clearly, to use a mild term, an act of indiscretion; and this Mr. Carter has done. We have nothing whatever to say as to the merits or demerits of his proposal; but we are satisfied that every man of business and common sense will agree with us that it is not right for any Director publicly to pledge himself, before discussion with his brother Directors, to any particular line of conduct; and that nothing can be more injudicious than to attempt to exercise pressure from without upon a body of gentlemen who are just elected to office, and whose only desire naturally and necessarily is, how best they may further the interests of the Society. The proper place for the discussion of all matters affecting the interests of the Society, is manifestly the board-room of the Direction. The Directors are elected by those who have a firm faith in their ability and trustworthiness; and common sense and courtesy dictate that to them should be left the management of the Society. Mr. Carter seems to have forgotten what we pointed out a fortnight ago—that there is no doubt that all suggestions made will be freely discussed at the meeting of the Directors. If the



Director of any ordinary board of management had done what Mr. Carter has in this case, he would doubtless be advised by his brother Directors to retire from the office of Director; and we certainly should recommend Mr. Carter, in the interests of the Society, at once to retire from the office to which he was last week elected.

The Committee of Council last week elected Directors; and when we state that those Directors are Dr. Burrows, Dr. Symonds, Mr. Carden, Mr. Heckstall Smith, as well as Mr. Carter, we have said enough to show that the affairs of the Society, so far as the Committee of Council is concerned, are in the hands of men of honour and of business: and there can be no question that the Branches will elect men of like repute and capability. We may add, that Dr. Westall, who had an equal number of votes with Mr. Carter, gave way on purpose to allow that gentleman to ventilate his opinions at the Board. Before, however, even the Board has met, or any acts have been done, or discussion held, Mr. Carter's vanity leads him to rush into print, and ask gentlemen to put a pressure on the Branches, in order to force them to elect Directors pledged to carry out his (Mr. Carter's) ideas! He actually *defies* the Board to act differently from his opinion: "I should like the Directors to consider the question of limitation, under the pressure of 200 or more applications from gentlemen who are not members of the Association, and who are prepared, in the event of being refused, to establish a separate fund of their own." Not only this; but Mr. Carter has the impertinence to publish a gratuitous misstatement and insult; viz., that the majority of the Committee have supported the Provident Fund, "*because they think it will strengthen the Association; and they, therefore, welcome it for the sake of the Association, rather than for the sake of the men who will chiefly need it.*" Mr. Carter wishes the profession to believe that he is the only person who has any real charity in the matter; and that, unless his views are received as laws absolutely and without discussion, the Society is of no use.

We think we have said enough to show that, the sooner Mr. Carter resigns the office of Director, the better it will be. If he had been the bitterest enemy of the Society, instead of its *soi-disant* friend, he could not have devised a more ingenious means of doing it an injury than the document which he has just published and circulated. We have no doubt, however, that his own indiscretion, with the aid of our remarks, will render his actions harmless.

#### THE ADVERTISING TRIBE.

WE have thought it well to bring together the following advertisements, which blacken the pages of almost every newspaper in every part of the country.

The attention of the Medical Council should, at all events, be directed to the fact. What amount of accumulated misery is represented by these things we need not stop to calculate.

A local newspaper—the journal of one of our distressed cotton district towns—presents us with a remarkable side of advertisements. The London professionals, who perform in the "silent friend" line, would seem still to gather a harvest out of the distresses of the people, if we may judge from the advertisements lying before us. We certainly had no idea that the field of human credulity was so richly worked in this direction. Let us just follow down this sheet of advertisements, which the *Blackburn Times* dishes up for the benefit of the distressed people of Blackburn.

"A physician", who hails from Maddox Street, leads off the ball. He supplies a *Lecture on Marriage*, "free by post, two stamps; sealed, 12." Next, Dr. Bright guarantees in fourteen days to restore masculine power. His remedy is a lozenge; the price per packet, 12s., free by post. Dr. Thompson next presents us with "Neurotone", "a most certain remedy" for all sorts of diseases. Messrs. Perry, the celebrated, offer "The Silent Friend", "Cordial Balm", and "Copaiba and Cubeb Globules". John Kaye, Esq., of Prospect Hall, Essex, offers us "Worsdell's Pills", which prevent disease, and also cure it; are "everybody's medicine, equally suited to age and infancy, male and female". Let the *British Pharmacopœia* beat that, if it can! The next goods offered us are Brummagem wares, and Mons. Duval the agent—"The New French Remedy", a lozenge, the discovery of an eminent French physician. It "can be taken without the least fear of detection, and speedily restores tone and manly", etc.; 11s. per post. "Help for all" is at the service of any one who will forward a stamped envelope to Dr. Russell of Kentish Town; it is the production of "a physician upwards of forty years in practice". Messrs. Smith also give advice gratis upon the usual style of diseases. Mr. Beecham, for 9½d., supplies pills "worth a guinea a box"; it takes half a column to detail their virtues, which, by the way, are certified to by James Burnside and Mary Blandon. Triesmar No. 1, No. 2, and No. 3 stand next on the list. No. 1 cures spermatorrhœa, etc.; No. 2 eradicates gonorrhœa, etc.; and No. 3 "is the great continental remedy for syphilis". The price is 11s. or 33s., or £5; by taking £5 worth, you save £1:12. Dr. De Roos of Bedford Square offers £50 reward for information as to any of those impostors who "assume the doctor's name and title". Dr. De Roos elsewhere appears to indicate the nature of his wares. He is "M.D. of the Ecole de Médecine, Graduate in Medicine, Surgery, and Midwifery". He, therefore, very properly demands none of your penny postage-stamps, but a good honest guinea,

with a detail of the case: and promises advice and physic by return of post. He warns the public against the low tricks of rascally quacks.

"By the present law, none but the real physician dare attach M.D. to his name, as heavy penalties would thereby be incurred. The public should, therefore, guard against impostors who style themselves 'Dr.', 'Professor', 'M.R.A.S.', 'F.R.A.S.', 'M.A.', etc., in order to mislead the unwary as to their true character."

It takes nearly a column to detail all the doctor's wonderful remedies: *Guttæ Vitæ*, which cure in four weeks; *Therapion*, "the three days cure"; and the "Compound Renal Pills". "Keep your blood pure, and defy the doctor!" This you may effectually do by the purchase of Buchan's "Sarsaparilla Pills". If you are wretched, you may be made happy by purchasing *Marriage*, etc., post free for six stamps, from Dr. Marston, Principal of the Royal Institute of Anatomy and Science, Oxford Street; admission, 1s. Dr. Kahn's *Philosophy of Marriage* is gratis. Our old friend Holloway's ointment and pills are, of course, there. Mr. Laurie of Montague Street, out of mere gratitude, for a couple of postage-stamps, will impart valuable information. A physician will send "the free edition of his large work (120 pages)", on receipt of four penny stamps.

"*Medical Review*. The shoals and quicksands against which this little work is well calculated to guard the reader render its careful perusal especially worthy the attention of all young men."

Many more promising advertisements there are, of a like kind; and all wound up by *The Friend in Need* of Dr. Thompson, who gives boldly the contents of the work—

"Institutions of Marriage—Obligations of Wedlock—Causes of Interruption to Conjugal Happiness—Domestic Bliss—Healthy Offspring—Description of the Organs in both Sexes, their uses, powers, etc.—Masturbation, its consequences—Sensuality and Remorse—Male and Female Disorders, induced by Onanism—Barrenness, its Causes and Removal—Domestic Happiness—Parental Bliss—Turn of Life—Hope and Comfort—Secret Diseases, their Variety and Symptoms in various Subjects; their Remedy—Matrimony, its Trials, Joys, and Responsibilities—Deficiency of Natural Strength—How to Strengthen the Sexual System—Instruction to Sufferers—General Suggestions, of value to every person."

Such is the bill of fare dished up, at an enormous expense of advertisements, in one paper, for the benefit of the people of Blackburn! Cannot the Medical Council take the subject into their serious consideration?

#### ITERUM, ITERUMQUE CRISPINUS.

THE *Lancet* has had its usual annual outburst against the *BRITISH MEDICAL JOURNAL*. As on former occasions, it strongly recommends the members of the British Medical Association to give up their "sickly bantling" of a journal, and (we suppose we may add as a corollary) to become subscribers to the immacu-

late and complete *Lancet*. The article of this year is an exact parallel of former effusions; only as our successes increase so do the violence and dirt of its language. In it we note the following specimens of vernacular applied to the editor of the *JOURNAL*. "Utter falsehoods"; "Billingsgate abuse"; "falsification of terms"; "perversion of language for the purpose of excusing imbecility and venting abuse"; "utterly disgraceful"; "old falsehoods"; "fabricate false charges and shuffle out of them"; "transparent perversion of facts"; "renewal of maledictions"; etc. So much for the editor. Now for the *JOURNAL* itself. "Valueless as a representative of medical science"; "eked out with fourth-class matter, which only inspires tedium and contempt"; "one private friend of the *Lancet* never cuts it open"; "utterly worthless"; "disgraces the Association"; "drags on a sapless life by sucking the life-blood of the Association, and keeps it in a state of perpetual bankruptcy"; "destitute of influence on professional or public opinion"; "sucks up all the revenue"; "lacrymose and abusive"; "extremely imbecile"; "sickly bantling"; "a burthen and a grief."

Such is the language (*on one page*) used by a journal which, all the while, boasts itself to be the representative of the honour and science of the medical profession. Even the innocent authors of papers do not escape compliment: "The papers read at the annual meeting are, with few exceptions, utterly third-rate"; and are read only to be "buried amongst rubbish in the *JOURNAL*." The literary and scientific labours of all the leading practitioners in this country, recorded in these pages, are *rubbish!*—the papers read at our annual meetings "*utterly third-rate!*"

But why, ye gentlemen of the *Lancet*, all this *rabies insana*? these violent outpourings? The only crime of which we are conscious, is that of being very successful. Of course, the *Lancet* knows (and if it do not, we will give its gentlemen the information gratis) that, three or four years ago, when the present editor undertook the management of the *JOURNAL*, the number of members of the Association was about 1900; that the present number of members is above 2400; and that it is continually and steadily increasing. Are we uncharitable, in face of such a fact, in suggesting—merely suggesting—*hinc illæ lacrymæ*?

The progressive increase of the Association is, indeed, well worthy the consideration of those gentlemen who, as a correspondent says, seem to take delight in fouling their own nest, whilst innocently or knowingly playing the cards of the *Lancet*. Is there nothing significant to them in the fact, that the list of the members of the Association given in this day's *JOURNAL* contains very nearly a page more of names than the list of last year did?



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 Windsor, Thomas, Esq. Surgeon to the Salford and Pendleton Royal Hospital, and to the Eye Hospital, Manchester  
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 Regent's Park  
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 Stanger, G. E. Esq. Surgeon to the Dispensary, Nottingham  
 Stevenson, Fred, Esq. Nottingham  
 Stiff, W. P. M.B. Resident Physician to the Lunatic Asylum, Nottingham  
 Taylor, Chas. M.D. Mansfield Rd. Nottingham  
 Taylor, Henry, Esq. Surgeon to the Dispensary, Nottingham  
 Thompson, John N. Esq. Nottingham  
 Thompson, Joseph, Esq. Surgeon to the General Hospital, Nottingham  
 Watchorn, Isaac, M.D. Nottingham  
 White, Joseph, Esq. Surgeon to the General Hospital, Nottingham  
 Wilkinson, W. Esq. Hartbill, Worksop  
 Wood, William, Esq. Nottingham  
 Wright, James, Esq. Bottesford  
 Wright, Thomas, M.D. Surgeon to the General Hospital, Nottingham

**OXFORDSHIRE.**

Number of Members, 4.

Branches { Burnham-on-Marsh and Midland Counties.  
 Reading.

Acland, Henry Wentworth, M.D. F.R.S. Regius Professor of Medicine, Oxford  
 Chesterman, Shearman, Esq. Banbury  
 Child, Gilbert W. M.D. Physician to the Radcliffe Infirmary, Oxford  
 Giles, Richard, M.D. Oxford  
 Hester, James Henry, Esq. Surgeon to the Radcliffe Infirmary, Oxford  
 Jeston, Thos. W. Esq. Henley-on-Thames

**RUTLAND.**

Number of Members, 1.

Branch, None.

Keal, William, Esq. Oakham

**SHROPSHIRE.**

Number of Members, 77.

Branches { Shropshire Ethical.  
 Shropshire Scientific.

Andrews, Edwyn, M.D. Shrewsbury  
 Arrowsmith, J. Yarrow, Esq. Consulting Surgeon to the Salop Infirmary, Shrewsbury  
 Baddeley, William Edw. L.R.C.P. Ed. Newport  
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 Bayley, J. Esq. Bictou  
 Beddoes, William M. M.D. Physician to the Salop Infirmary, Shrewsbury  
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 Bidwell, Henry, M.D. Albrighton  
 Blake, Robert, Esq. Oswestry  
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 Brookes, W. P. Esq. Much Wenlock  
 Broughton, R. Esq. Ruyton-of-the-Eleven-Towns  
 Brown, John, Esq. Whitechurch  
 Burd, Edward, M.D. Physician to the Salop Infirmary, Shrewsbury  
 Cartwright, Peplow, Esq. Oswestry  
 Clement, William James, Esq. Shrewsbury  
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 Davis, William, Esq. Surgeon to the Welling-ton Dispensary, Pain's Lane, Wellington  
 Downes, Thomas R. C. Esq. Munslow  
 Eddowes, William, Esq. Pontesbury  
 Eddowes, William, jun. Esq. House-Surgeon to the Infirmary, Shrewsbury  
 Evans, Maurice B. Esq. Ellesmere  
 Eyeley, Joseph F. Esq. Llanymynech  
 Fenton, Henry, Esq. Surgeon to the Dispensary, Shrewsbury  
 Fuller, William, M.B. Oswestry  
 Glover, J. Esq. Dorrington, near Shrewsbury  
 Godby, Augustus H. M.D. Newport  
 Griffiths, Griffith H. M.D. Church Stretton  
 Groom, Thomas, Esq. Whitechurch  
 Gwynn, Samuel B. Esq. Wem  
 Gwynn, Samuel T. M.D. Whitechurch  
 Harries, John D. Esq. Surgeon to the Salop Infirmary, Shrewsbury  
 Hartshorne, F. H. L.R.C.P. Ed. Surgeon to the Ironbridge Dispensary, Broseley



Haslehurst, Thomas, Esq. Consulting Surgeon to the South Salop Infirmary, Claverley, Bridgnorth  
 Hayes, Henry, Esq. Wellington  
 Hickman, Joseph, Esq. Brocton, Worthen  
 Howlet, William, Esq. Surgeon to the Dispensary, Wellington  
 Hughes, John, L.R.C.P.Ed. Worthen  
 Humphreys, J. R. Esq. Surgeon to the Salop Infirmary, Shrewsbury  
 Johnson, Charles H. Esq. Shifnal  
 Johnson, Henry, M.D. Consulting Physician to the Salop Infirmary, Shrewsbury  
 Jones, Robert, Esq. Streford, Newton  
 Jones, W. Weaver, Esq. Cleobury Mortimer  
 Large, Joseph, Esq. Oswestry  
 McCarthy, G. D. R. Esq. Surgeon to the Wellington Dispensary, Wrockwardine Wood, Wellington  
 Moorhouse, J. W. Esq. Ellesmere  
 Morgan, John, Esq. Waters Upton, near Wellington  
 Morgan, Thomas, Esq. Madeley  
 Morris, James M. Esq. Market Drayton  
 Morris, William W. Esq. Cluu  
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 Pidduck, Thomas, Esq. Shrewsbury  
 Pope, Thomas, Esq. Cleobury Mortimer  
 Proctor, John W. Esq. Shifnal  
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 Sandford, F. J. M.D. Market Drayton  
 Soame, C. B. H. Esq. Surgeon to the Ironbridge Dispensary, Dawley Green  
 Styrup, Jukes, L.K. & C.C.P.I. Physician to the Salop Infirmary, Shrewsbury  
 Sutton, John H. Esq. Longdon, Pontesbury  
 Thurstfield, Richard, Esq. Surgeon to the Ironbridge Dispensary, Broseley  
 Thurstfield, William, Esq. Surgeon to the Dispensary, Bridgnorth  
 Walmesley, John A. Esq. Holnet  
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 Weston, Robert P. Esq. Wellington  
 Wetherhead, Thomas, Esq. Presa  
 Whitecombe, Edm. B. Esq. Cleobury Mortimer  
 Whitwell, Francis, Esq. Shrewsbury  
 Whytehead, Henry Y. M.D. Shrewsbury  
 Wilding, Richard, Esq. Church Stretton  
 Willing, Geo. F. B. L.R.C.P.Ed. Cressage  
 Wilson, Joseph G. L.R.C.P.Ed. Wen  
 Wood, Samuel, Esq. Senior Surgeon to the Salop Infirmary, Shrewsbury

### SOMERSET.

{ Number of Members. 103.  
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 { West Somerset

Adams, J. D. M.D. Martock  
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 Alford, Henry J. M.B. Surgeon to the Taunton and Somerset Hospital, Taunton  
 Alford, Richard, Esq. Consulting Surgeon to the Dispensary, Weston-super-Mare  
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 Bennett, William F. Esq. Yeovil  
 Bernard, C. E. M.D. Weston-super-Mare  
 Boodle, Robt. H. Esq. Chilcompton  
 Brabazon, W. P. L.K. & C.C.I. Bath  
 Brace, William H. L.R.C.P.Ed. Surgeon to the United Hospital, Bath  
 Bridge, S. F. M.D. Wellington  
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 Bush, William, Esq. Senior Surgeon to the Eye and Ear Infirmary, and to the Eastern Dispensary, Bath  
 Carter, Richard, Esq. House-Surgeon to the Eastern Dispensary, Bath  
 Church, William J. Esq. Bath  
 Coates, Chas. M.D. Physician to the General Hospital and United Hospital, Bath  
 Cockey, Edmund, Esq. Frome  
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 Collins, John B. Esq. Dulverton  
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 Cornwall, J. Esq. Ashcott, near Glastonbury  
 Cowan, Samuel Price, Esq. Bath

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 Day, William, W. Esq. Long Ashton  
 Falconer, R. Wilbraham, M.D. Physician to the United Hospital and General Hospital, Bath  
 Farratt, Samuel, Esq. Taunton  
 Flemming, Thomas H. M.D. Freshford, Bath  
 Fowell, Samuel, Esq. Milverton  
 Fowler, Richard Sumner, Esq. Bath  
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 Fox, Charles Joseph, M.D. Brislington  
 Fox, Edward F. Esq. Brislington  
 Fox, Francis K. M.D. Brislington  
 Freeman, G. D. Esq. Surgeon to the Western Dispensary, Bath  
 Gaine, C. Esq. Bath  
 George, Richard Francis, Esq. Bath  
 Gillett, W. E. L.R.C.P.Ed. Taunton  
 Gourlay, Frederick, M.D. Physician to the Dispensary, Weston-super-Mare  
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 Harper, Charles, L.R.C.P.Ed. Batheaston  
 Harries, Charles Alexander, Esq. Bath  
 Harrison, Thomas S. M.D. Frome  
 Haviland, Alfred, Esq. Surgeon to the Infirmary, Bridgewater  
 Hensley, Henry, M.D. Bath  
 Hinton, Joseph, Esq. Charterhouse Hinton  
 Hutchins, W. Esq. Keynsham  
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 Jay, Chas. Esq. Queen Camel, Ilchester  
 Kelly, William Marwood, M.D. Physician to the Taunton and Somerset Hospital, Taunton  
 Kidgell, George, Esq. Wellington  
 Kinglake, John Hamilton, M.D. Taunton  
 Lawrence, Joseph, Esq. Bath  
 Legge, W. Esq. Surgeon to the Dispensary, Wiveliscombe  
 Liddon, Wm. M.B. Surgeon to the Taunton and Somerset Hospital, Taunton  
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 Martyn, Richard W. Esq. Martock  
 Mason, Frederick, L.R.C.P.Ed. Surgeon to the Eye Infirmary, Bath  
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 Munckton, William Webber, Esq. Coroner for West Somerset, Curry Rivel, Taunton  
 Norris, Hugh, L.R.C.P.Edin. South Petherton  
 Olivey, Hugh P. Esq. North Curry  
 Parsons, Frederick J. Esq. Yeovil  
 Parsons, Joshua, Esq. Frome  
 Plozman, Thomas, Esq. North Curry  
 Prankerd, John, Esq. Langport  
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 Reynolds, William, Esq. Wellington  
 Roberts, John, Esq. Resident Medical Officer to the Mineral Waters Hospital, Bath  
 Rogers, George, M.D. Long Ashton  
 Silke, W. Murray, Esq. Nether Stowey  
 Skeate, Edwin, Esq. Bath  
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 Soden, J. Esq. Surgeon to the United Hospital, Bath  
 Spender, John Kent, Esq. Surgeon to the Eastern Dispensary, Bath  
 Stockwell, Thomas G. Esq. Surgeon to the General Hospital and Eastern Dispensary, Bath  
 Stone, Robert Nathaniel, L.R.C.P.Ed. Bath  
 Stringfield, Joseph, Esq. Weston-super-Mare  
 Stuckey, George, Esq. Martock  
 Surridge, James, M.D. Wincanton  
 Swete, Edward H. Esq. Wington  
 Talbot, George, Esq. Bridgewater  
 Teale, J. W. Esq. House-Surgeon to the United Hospital, Bath  
 Terry, George, Esq. Mells, near Frome  
 Trevor, William, Esq. Dulverton  
 Tunstall, James, M.D. Bath  
 Walker, William C. Esq. Shepton Mallett  
 Wallis, Charles C. Esq. Castle Carey  
 Walter, W. W. Esq. Stoke-under-Ham  
 Watson, Thomas Sinden, M.D. Senior Physician to the General Hospital, Bath  
 Weatherley, Frederick, Esq. Portishead  
 White, William A. Esq. Frome  
 Winterbottom, Washington L. M.D. Surgeon to the Infirmary, Bridgewater  
 Woodforde, Francis Henry, M.D. Taunton

### STAFFORDSHIRE.

Number of Members. 11.  
 Branch. Birmingham and Midland Counties.

Alcock, Annerly, Esq. Smethwick  
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 Belcher, Robert Shirley, Esq. Surgeon to the Dispensary, Burton-on-Trent  
 Browne, Benjamin S. Esq. West Bromwich  
 Browne, William, Esq. Surgeon to the Dispensary, Lichfield  
 Bury, George, Esq. Handsworth  
 Butler, James, Esq. Great Bridge  
 Coleman, E. Hayling, Esq. Consulting Surgeon to the South Staffordshire Hospital, Wolverhampton  
 Cooke, William H. M.D. Aldridge  
 Cooper, Richard, Esq. Leek  
 Davies, R. A. L.R.C.P.Ed. Asylum, Stafford  
 Day, Henry, M.D. Physician to the County Infirmary, Stafford  
 Dehane, E. F. Esq. Wolverhampton  
 Downes, W. Esq. Handsworth  
 Duncalfe, Henry, Esq. West Bromwich  
 Girdlestone, William T. Esq. Penkridge  
 Holyoake, Thomas, Esq. Kivver, Stourbridge  
 Hopkins, William, L.R.C.P.Ed. Handsworth  
 Howitt, George E. Esq. Wednesbury  
 Jackson, Thos. V. Esq. Surgeon to the South Staffordshire Hospital, Wolverhampton  
 Kelly, Thomas, Esq. Tipton  
 Kent, W. J. Esq. West Bromwich  
 Lowe, George, Esq. Burton-on-Trent  
 Lynes, William M.D. Wednesbury  
 Male, C. T. Esq. West Bromwich  
 Manley, John, Esq. West Bromwich  
 Monckton, D. Henry, M.D. Rugeley  
 Moore, E. Dennis, Esq. Walsall  
 Moore, Thomas, Esq. Cradley Heath  
 Morgan, M. Butler, Esq. Senior Surgeon to the Dispensary, Lichfield  
 Nesbitt, F. A. Esq. Surgeon to the South Staffordshire Hospital, Wolverhampton  
 Newnham, Christ. A. Esq. Wolverhampton  
 Partridge, J. Esq. Darlaston, nr. Wednesbury  
 Proctor, Herbert E. L.R.C.P.Ed. Wednesbury  
 Thomson, Spencer, M.D. Burton-on-Trent  
 Thornhill, J. H. Esq. Willenhall  
 Underhill, Thomas, Esq. Great Bridge, Tipton  
 Underhill, William L. Esq. Tipton  
 Wades, John W. B. M.D. Hanley  
 Welchman, C. E. Esq. Lichfield  
 Wollaston, R. M.R.C.P. Physician to the General Infirmary, Stafford

### SUFFOLK.

Number of Members. 54.

Branch. East Anglian.

Adams, Edward B. Esq. Surgeon to the Dispensary, Bungay  
 Barkway, F. T. Esq. Lavenham  
 Bartlet, A. H. M.D. Surgeon to the East Suffolk Hospital, Ipswich  
 Beck, Henry, Esq. Needham Market  
 Blackett, Edward R. M.D. Physician and Surgeon to the Dispensary, Southwold  
 Bullen, George, Esq. Senior Surgeon to the East Suffolk Hospital, Ipswich  
 Bullen, George, jun. Esq. Ipswich  
 Chevallier, Harrington, M.D. Physician to the East Suffolk Hospital, The Grove, Ipswich  
 Cooper, William, M.D. Bury St. Edmund's  
 Cooper, H. R. Esq. Ixworth (dead)  
 Crofton, William Edward, Esq. Surgeon to the Dispensary, Beccles  
 Day, William H. M.D. Newmarket  
 Durrant, Christopher Mercer, M.D. Physician to the East Suffolk Hospital, Ipswich  
 Edden, W. H. Esq. Haughey  
 Edwards, George C. Esq. Ipswich  
 Elliston, William, Esq. Ipswich  
 Fairclough, Richard, Esq. Newmarket  
 Freeman, Spencer, Esq. Stowmarket  
 Fuller, Harry, Esq. House-Surgeon to the Suffolk General Hospital, Bury St. Edmund's  
 Fyson, Robert, Esq. Newmarket  
 Gardner, James, L.R.C.P.Ed. Bungay  
 Gissing, John Stearn, Esq. Woodbridge  
 Goodwin, John W. M.D. Physician to the Suffolk General Hospital, Bury St. Edmund's  
 Gorham, Richard V. Esq. Yoxford  
 Grashaw, H. Esq. Lactfield, Framlingham  
 Growse, Robert, Esq. Bidestone  
 Hammond, Charles C. Esq. Surgeon to the East Suffolk Hospital, Ipswich  
 Harris, F. H. Esq. Mildenhall

Haward, Fred-rick, Esq. Halesworth  
Hele, Nicholas F. Esq. Aldeburgh  
Hinnell, G. J. Esq. Bury St. Edmund's  
Image, W. Edmund, Esq. Surgeon to the Suffolk General Hospital, Bury St. Edmund's  
Jones, Robert Edwards, Esq. Long Melford, Sudbury

Kilner, John, Esq. Surgeon to the Suffolk General Hospital, Bury St. Edmund's  
Kirkman, John, M.D. Resident Physician to the Suffolk Lunatic Asylum, Melton  
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Mann, Charles F. Esq. Boxford  
Marshall, Charles G. Esq. Woodbridge  
Martin, Robert, Esq. Ipswich  
Matthews, Benjamin F. Esq. Norton  
Mead, George B. M.D. Newmarket  
Miller, Walter W. M.D. Eye  
Muriel, John Thomas, Esq. Hadleigh  
Pennington, J. Esq. Needham Market (leat)  
Pretty, George Wilson, Esq. Fressingfield  
Read, Charles G. Esq. Stradbroke  
Rendle, Charles B. Esq. Saxmundham  
Sampson, George G. Esq. Surgeon to the East Suffolk Hospital, Ipswich  
Snappson, L. Esq. Long Melford, Sudbury  
Smith, Charles C. Consulting Surgeon to the Suffolk General Hospital, Bury St. Edmund's  
Taylor, Henry, Esq. Ixworth  
Tench, L. B. Esq. Wickham Market  
Thompson, Robert, Esq. Braudon  
Williams, John, M.D. Bury St. Edmund's

## SURREY.

Number of Members...68.

Branches { South-Eastern.  
{ Metropolitan Counties

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Bacon, Charles Edward, M.D. Guildford  
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Barnes, George H. M.D. Physician to Guy's Hospital, Union Street, Southwark  
Berney, Edward, Esq. Croydon  
Bottomley, George, Esq. Croydon  
Bush, John, Esq. The Retreat, Clapham  
Carpenter, Alfred, M.D. Croydon  
Chaldecott, Charles William, Esq. Dorking  
Chapman, George, Esq. Lingfield  
Clapton, Edw. M.D. Assistant-Physician to St. Thomas's Hospital, St. Thomas's Street  
Clark, Frederick Le Gros, Esq. Surgeon to St. Thomas's Hospital, St. Thomas's Street  
Clark, Willington, Esq. Sutton  
Cleaver, Henry A. Esq. Croydon  
Coles, William F. M.D. Croydon  
Cox, Abram, M.D. Kingston-on-Thames (dead)  
Cooke, William R. Esq. Lower Norwood  
Davies, W. Esq. York Town, near Barchet  
Forster, J. Cooper, Esq. Assistant-Surgeon to Guy's Hospital, St. Thomas's Street  
Hallowes, Frederick B. Esq. Redhill  
Harris, Henry, Esq. Reigate  
Henley, Thomas L. Esq. Croydon  
Hetley, F. M.D. Norwood  
Holman, Constantine, M.D. Reigate  
Johnson, Jeffery S. Esq. Croydon  
Jones, Sydney, Esq. Assistant-Surgeon to St. Thomas's Hospital, St. Thomas's Street  
Kelsey, Arthur, Esq. Reigate  
Lashmar, Charles, M.D. Croydon  
Lloyd, Henry J. Esq.  
Love, Gilbert, Esq. Wimbledon  
Martin, Thomas, Esq. Reigate  
Matthews, Arthur, Esq. Melbourne Place, Old Kent Road  
Mushet, William B. M.B. Norwood  
Napper, Albert, Esq. Cranley, near Guildford  
Owen, Francis, Esq. Leatherhead  
Palmer, F. W. Esq. Old Kent Road  
Patrick, Jarman, Esq. Norwood  
Paul, J. H. M.D. Camberwell  
Pollock, Robert J. Esq. Wimbledon Park  
Ray, Edward, M.D. Dulwich  
Reece, Richard, Esq. Walton-on-Thames  
Rendle, James D. M.D. Medical Officer to the Government Convict Prison, Brixton Hill  
Robert-Harris, C. H. Esq. Lainesdowne Road, Clapham Road  
Roots, W. Sudlow, Esq. Kingston-on-Thames  
Roper, Alfred G. Esq. Croydon  
Ross, Frederick D. L.R.C.P. Ed. Surgeon to the Dispensary, Guildford  
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Seaton, Edward C. M.D. Surbiton  
Shaw, George, Esq. Battersea  
Shorthouse, J. H. M.D. Car-halton  
Shurlock, Mainwaring, Esq. Chertsey

Sisson, Andrew, Esq. Reigate  
Sloman, Samuel G. Esq. Faruham  
Soper, William, Esq. St. George's Villas, Stockwell Road  
Spitta, Robert J. M.D. Medical Officer to the Clapham Dispensary, Clapham Common  
Stedman, James R. M.D. Surgeon to the Dispensary, Guildford  
Steele, John S. Esq. Reigate  
Stilwell, George, Esq. Epsom  
Street, William, Esq. Reigate  
Sutherland, William, M.D. Croydon  
Tilley, S. Esq. Paradise Row, Rotherhithe  
Walter, John, M.D. Reigate  
Ward, Joseph, Esq. Epsom  
Webster, George, M.D. Dulwich  
Westall, Edward, M.D. Caterham  
Willis, Robert, M.D. Barnes  
Wisden, William, Esq. Oxted  
Yate, Frederick, Esq. Godalming

## SUSSEX.

Number of Members...63.

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Adamson, J. Esq. Rye  
Ades, W. F.R.C.P. F.R.S. Brighton  
Adey, Charles A. M.D. Physician to the East Sussex Infirmary, St. Leonards-on-Sea  
Aldersey, Wm. H. Esq. Cliftonville, Brighton  
Auesbury, J. Esq. Brighton  
Boxall, H. Esq. Wishborough Green, Horsham  
Bull, John Henry, Esq. Lindfield  
Burrows, J. Cordy, Esq. Brighton  
Buss, Thomas Sp., M.D. Cuckfield  
Caulle, Adolphus W. W. Esq. Hestfield  
Collet, Henry, M.D. Surgeon to the Dispensary, Worthing  
Cunningham, J. M. M.D. Hailsham  
Davies, Robert C. N. Esq. Rye  
Dill, Richard, M.D. Brighton  
Eden, Thomas E. Esq. Brighton  
Elliott, Robert, Esq. Senior Surgeon to the Infirmary, Chichester  
Foreman, Robert C. M.D. Brighton  
Furner, Edmund J. Esq. Surgeon to the Sussex County Hospital, Brighton  
Gravelly, Richard, Esq. Newfield, Uckfield  
Gravelly, Thomas, Esq. Cowfold  
Hall, Alfred, M.D. Physician to the Dispensary, Brighton  
Harris, W. J. Esq. Worthing  
Hodges, George P. Esq. Brighton  
Holman, George, Esq. Uckfield  
Holman, Henry, Esq. East Hoathly  
Humphry, Frederick A. Esq. Assistant-Surgeon to the Sussex County Hospital, Brighton  
Ingram, William, Esq. Midhurst  
Johnson, Athol A. Esq. Brighton  
Kebbell, William, M.D. Physician to the Sussex County Hospital, Brighton  
Kent, Octavius J. Esq. Eastbourne  
King, William, M.D. Consulting Physician to the Sussex County Hospital, Brighton  
Leslie, Percy, M.D. Eastbourne  
Lowdell, George, Esq. Surgeon to the Sussex County Hospital, Brighton  
McCarogher, Joseph, M.D. Senior Physician to the Infirmary, Chichester  
Money, J. F. M.D. Brighton  
Moore, George, M.D. Hastings  
Moore, W. Withers, M.D. Physician to the Dispensary, Brighton  
Nicholson, Hon. T. M. P. Framfield  
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Rogers, Robert J. Esq. Brighton  
Ross, Andrew, M.D. Chichester  
Scott, Samuel K. Esq. Brighton  
Sharpe, Alfred, M.D. Worthing  
Smith, Heckstall, Esq. Hove, Brighton  
Smith, John P. M. Esq. Surgeon to the Dispensary, Brighton  
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Stephens, Joseph, M.D. Brighton  
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Tatham, George, Esq. Brighton  
Taylor, William E. M.D. Pulborough  
Tuke, J. K. Esq. Brighton  
Tyacke, Nicholas, M.D. Physician to the Infirmary, Chichester  
Underwood, John, M.D. Surgeon to the Dispensary, Hastings

Weekes, W. H. Carlile, Esq. Hurstpierpoint  
Whately, Edward, Esq. Brighton  
Wilton, William, Esq. Brighton  
Winter, John N. Esq. Brighton  
Winter, Thomas B. Esq. Brighton  
Woodridge, William, Esq. Preston, Brighton

## WARWICKSHIRE.

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Bailey, J. H. T. Esq. Colehill  
Baker, Alfred, Esq. Surgeon to the General Hospital, Birmingham  
Baker, Robert L. Esq. Bordesley, Birmingham  
Barker, John, Esq. Colehill  
Barratt, Alfred, L.R.C.P. Ed. Birmingham  
Bartlett, Thomas H. M.B. Surgeon to the Hospital for Children, and Lecturer on Physiology in Sydenham College, Birmingham  
Berry, Samuel, L.R.C.P. Ed. Surgeon-Accoucheur to the Queen's Hospital, Birmingham  
Brinkell, E. Esq. Surgeon to the Self-Supporting Dispensary, Coventry  
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Bodington, Geo. L.R.C.P. Ed. Sutton Coldfield  
Bowen, H. Esq. Kineton  
Bracey, Charles, Esq. Birmingham  
Brown, C. F. Esq. Leamington  
Bucknill, H. W. Esq. Rugby  
Bucknill, S. Birch, M.D. Rugby  
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Carter, Thomas A. M.D. Physician to the Hospital, Leamington  
Chavasse, Pye Henry, Esq. Birmingham  
Chavasse, Samuel, Esq. Birmingham  
Cheshire, Edwin, Esq. Surgeon to the Birmingham and Midland Eye Hospital, Newhall Street, Birmingham  
Clay, John, Esq. Professor of Midwifery in Queen's College, Newhall St. Birmingham  
Clayton, M. H. Esq. Birmingham  
Dartnell, George Russell, Esq. Inspector-General of Hospitals, Henley-in-Arden  
Davies, John Birt, M.D. late Senior Physician to the Queen's Hospital, Birmingham  
Davies, J. Redfern, Esq. Birmingham  
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Stewart, T. Grainger, M.D. Pathologist to the Royal Infirmary, Edinburgh  
Syme, James, Esq. F.R.S.E. Professor of Clinical Surgery in the University of Edinburgh, Rutland Street, Edinburgh  
Thomson, David, M.D. F.R.S. Edinburgh

### FIFE.

Alty, Robert, James, Esq. Leith  
Faul, James M. M.D. Dundee

Low, Andrew, Esq. Ferryport-on-Craig  
Lyell, John, M.D. Newburgh  
Troup, Francis, Esq. Auchtermuchty  
Wiseman, Robert, Esq. Cupar

### FORFARSHIRE.

Christie, James, M.D. Consulting Physician to the Royal Infirmary, Dundee  
Crockett, William, M.D. Attending Surgeon to the Royal Infirmary, Dundee  
Duncan, Alexander, M.D. Dundee  
Gibson, W. Lockhart, M.D. Consulting-Physician to the Royal Infirmary, Dundee

### KINCARDINESHIRE.

Henderson, Joseph, Esq. Fordoun

### LANARKSHIRE.

Barnes, James, M.D. Glasgow  
Brennan, George, M.D. Surgeon to the Royal Infirmary, Douglas, Scotland, Glasgow  
Douglass, Daniel, M.D. Strathaven  
Dunbar, Henry, M.D. Glasgow  
Easton, John Alexander, M.D. Professor of Medicine in the University, Glasgow  
Kelly, Adam L. M.D. Glasgow  
Lister, Joseph, M.B. F.R.S. Professor of Surgery in the University, Glasgow  
Longman, W. P. M.D. Glasgow  
MacLeod, G. R. M.D. Lecturer on Surgery in Anderson's University, Glasgow  
Prichard, William, M.D. Partrick, Glasgow  
Prichard, E. W. M.D. Glasgow  
Ritchie, Charles, M.D. Physician to the Royal Infirmary, Glasgow  
Somerville, Thomas, Esq. R.N. Lanark  
Thomson, Allen, M.D. F.R.S.E. & L. Professor of Anatomy in the University, Glasgow  
Watt, William, M.D. Glasgow

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James, John G. Esq. Elgin

### PERTHSHIRE.

Bennett, James P. M.D. Perth  
Cuthbert, Matthew R. M.D. Perth

### ROSS-SHIRE.

Mann, Donald, Esq. Hain, Strathmore

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Number of Members, 14.

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Stephenson, Robert, M.D. F.R.C.S. Consulting Physician to the General Hospital, Belfast

### CAVAN.

Sproule, Jacob, Esq. Aghavea

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Collins, Thomas, Esq. Dublin  
Croker, Charles P. M.D. Consulting-Physician to the General Hospital, Dublin  
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Gorman, William, Esq. Dublin  
Harrison, William, Esq. Dublin  
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Moore, William D. M.D. Dublin  
Mulock, Robert, M.D. Dublin  
Nalty, John, M.D. Dublin  
O'Flaherty, Jeremiah, Esq. Kingstown

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### GALWAY.

Payne, Christopher J. M.D. Roundstone

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Neilson, Charles, Esq. Killala

### ROSCOMMON.

Gleeson, Edward M. Esq. Adda

### TIPPERARY.

Fraser, Thomas, M.D. Hugh Hussars, Barrack, Cash

### WATERFORD.

Currey, John E. M.D. Lismore  
Mackesy, Thomas L. M.D. Waterford

## FOREIGN COUNTRIES.

Number of Members, 14.

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Charles, Thomas, Esq. West Maitland  
Hobart, Henry, Esq. M. Hobart  
Moore, John A. Esq. New Norfolk, Hobart

### CANADA.

Bowman, William E. M.D. Montreal

### FRANCE.

Crossby, H. E. M.D. Nice  
Ward, T. Ogden, M.D. Cher

### INDIA.

Branch, Bengal.

Bentson, W. B. M.D. Calcutta  
Bycock, Baboo Sankar, Calcutta  
Chuckerbutty, Soorjocoomar G. M.D. Physician to the Medical College, Hooghly, Calcutta  
Clark, Stewart, Esq. Inspector of Prisons, North-Western Provinces  
Dey, Baboo Kanny Loll, Medical College, Calcutta  
Dey, Baboo Moliesh Chunder, Calcutta  
Fayrer, Joseph, M.D. Professor of Surgery in the Medical College, Calcutta  
Fitzgerald, E. A. M.D. Morar, Gwalior  
Hinder, J. Esq. Chandi Hospital, Calcutta  
Kastogree, Baboo Unoda Churn, Burrisal, Bengal  
Kendal, Bernard, Esq. Ranhee, Chota Nagpore  
Kur, Baboo Doorgo Doss, Medical College, Calcutta  
Majumdar, Ragh, Esq. B. N. Medical Service, Calcutta  
Navin, G. R. N. D. Chatterjee, Dispensary, Calcutta  
O'Donnell, Robert, Esq. N. Calcutta  
Partridge, S. B. Esq. Medical College, Calcutta  
Sax, Baboo Chunder, N. Calcutta  
Sax, Baboo Ram Chunder, Medical Hospital, Dacca  
Sircar, Mohendro Loll, M.D. Calcutta  
Thring, R. S. O. M.D. Bengal Medical Service, Roorkee  
Tyler, J. W. M.D. Etawah, North-Western Provinces

### MALTA.

Schmitt, Joseph, M.D. Valletta

## HONORARY MEMBER.

Newman, W. Esq. F.R.C.S. & F.R.C.P. Wells

## Association Intelligence.

### REPORT OF MEETING OF COMMITTEE OF COUNCIL:

*Held at Birmingham, September 1st, 1864.*

PRESENT—Sir Charles Hastings, M.D., D.C.L. (in the Chair); Dr. Bryan; Mr. Cartwright; Mr. Clayton; Dr. Holman; Dr. Paget; Dr. Richardson; Mr. Southam; Dr. Stewart; Dr. Waters; Dr. Westall; Dr. Wilkinson; and Mr. Watkin Williams (General Secretary).

The following resolutions were adopted.

1. That the Editor of the JOURNAL be authorised to forward the publications of the British Medical Association to the Society for the Promotion of Medical Science in the Netherlands.

2. That the following gentlemen, elected by ballot, be the representatives of the Committee in the Directorate of the Medical Relief Fund:—H. D. Carden, Esq. (Worcester); Dr. Symonds (Clifton); Dr. Burrows (London); T. Heckstall Smith, Esq. (St. Mary's Cray); and R. B. Carter, Esq. (Stroud).

T. WATKIN WILLIAMS, Gen. Sec.

13, Newhall Street, Birmingham, September 5th, 1864.

### THE MEDICAL PROVIDENT FUND.

DR. RICHARDSON begs to announce the following contributions to the Guarantee Fund—

|   | £.  | s. | d. |
|---|-----|----|----|
| Amount already contributed.....         | 219 | 18 | 0  |
| H. Veasey, Esq. (Woburn).....           | 5   | 5  | 0  |
| Dr. E. Westall (Caterham).....          | 5   | 5  | 0  |
| M. H. Clayton, Esq. (Birmingham).....   | 5   | 5  | 0  |
| Dr. A. P. Stewart (London).....         | 5   | 5  | 0  |
| G. Southam, Esq. (Manchester).....      | 5   | 5  | 0  |
| Dr. Eason Wilkinson (Manchester).....   | 5   | 5  | 0  |
| T. Taylor Griffith, Esq. (Wrexham)..... | 21  | 0  | 0  |
| Richard F. George, Esq. (Bath).....     | 5   | 0  | 0  |
| Richard Dunn, Esq. (London).....        | 5   | 5  | 0  |

Further contributions will be announced.

12, Hinde Street, Manchester Square, W.

### WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., Hon. Sec.

Taunton, September 1864.

### BENGAL BRANCH: ORDINARY MEETING.

At the meeting of this Branch held on May 10, 1864, Baboo OMESH CHUNDER DUTT read an account of three cases which occurred in Dr. Chuckerbutty's wards in the Medical College Hospital within the last few days; viz.:

1. A case of Amyloid Degeneration, in which deposit was found at the *post mortem* examination in the lymphatic glands of the groins, the kidneys, the spleen, the liver, and the mesentery. Specimens, preserved in spirit, were placed on the table. [The case is reported at p. 299.]

2. Case of Chronic Ulceration of the Stomach; in which an ulcer of the size of a quarter of a rupee was found in the greater curvature, at the pyloric end of the organ.

3. A Case of General Paralysis from Cerebral Apoplexy; in which during life the whole of the body

was paralysed, and after death a large effusion of blood was discovered in the lateral and the third ventricles extending to the base, the outer aspect of the left anterior cerebral lobe and left cerebellar hemisphere being likewise congested and stained red.

With reference to the last case, Dr. CHEEVERS wished to know why the paralysis was called general; and with reference to the first case,

Dr. FAYRER wished Dr. Chuckerbutty would explain the nature of the amyloid degeneration, and its symptoms during life.

In reply to Dr. Chevers's question, Dr. CHUCKERBUTTY said that the paralysis involved the entire body, and was not confined to one side or to the lower half; and in reply to Dr. Fayrer, he observed that "amyloid degeneration" is a term which has been applied by Professor Virchow to the waxy degeneration of the Edinburgh school, because the affected parts become brownish red by iodine, and then, on the addition of sulphuric acid, bluish or violet. The sulphuric acid alone has little or no action on it; and iodine applied to the healthy textures around turns them simply yellow. The application of these tests is said to require delicate management, more especially the sulphuric acid, which presents great difficulty in being duly portioned so as to yield the desired result. On account of its behaviour with iodine and sulphuric acid, Virchow thinks the amyloid matter resembles starch in some measure, though not to the same extent as the corpora amylacea found in the healthy endymia of the brain, which readily become blue from iodine without sulphuric acid. It is, therefore, amyloid, not amylaceous, probably from its being enclosed in cells which resist the action of iodine alone. The amyloid matter is a morbid deposit which, according to Virchow, occurs primarily in the minute arteries, and then extends to the surrounding textures in advanced cases. Thus, in the kidneys, the minute arteries entering the Malpighian capsules are first affected when the deposit is found only in the cortical substance, though afterwards it may extend even to the pyramids; in the spleen the same thing takes place; in the liver the intermediate zone in the lobules formed by the minute branches of the hepatic artery is the first seat of it, when this alone is waxy, while the outer zone formed by the portal branches is yellow, and the central zone formed by the hepatic vein is pink; in advanced cases, however, the whole lobule becomes uniformly waxy. Both these conditions existed in the case under consideration. In the lymphatic glands, the deposit also occurs in the minute arteries which enter them along the tubercular, and pass down to the follicles containing the gland-cells. The symptoms during life are said to be similar to those of Bright's disease, only the prostration is more marked. The urine becomes albuminous, and scanty or suppressed. There is generally dropsy; the bowels are irregular, sometimes confined, at other times loose, and so on. It is so much like Bright's disease during life, that the present case was regarded as such until its true nature was revealed in the dead-house. There was an European patient then in the hospital who was suspected by Dr. Goodeve to be suffering from the amyloid disease. In him, also, the lymphatic glands of the groin were enlarged, the urine was slightly albuminous, and sometimes suppressed for twenty-four, nay forty-eight hours, and then again flowed freely. There were great prostration of strength, much emaciation, and some oedema of the feet. Professor Virchow says the amyloid degeneration unfits organs for the performance of their functions by cutting off the supply of blood, in consequence of the filling up and obliteration of their arteries. That was the only *post mortem* examination



of this affection Dr. Chuckerbutty had seen; and, although the disease was suspected in the other case, yet, without a *post mortem* examination, they could not positively say that it existed there. Therefore, he must plead ignorance as to the earliest symptoms of the disease. It will require much experience and comparison of the symptoms during life and the appearances after death, before anything trustworthy can be accurately laid down on that subject.

## Reports of Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 28TH, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

THE ORIGIN, STRUCTURE, AND MODE OF DEVELOPMENT OF THE MULTICULAR CYSTS OF THE OVARIES.  
BY WILSON FOX, M.D.

The first division of the paper consists of a *résumé* of the views hitherto held with regard to the origin of these cysts. The author considered that the opinions hitherto expressed on this point might be divided into two chief classes.

1. Those which attributed the cysts of the ovary either to morbidly affected Graafian vesicles, or to secondary formations from these structures.

2. Those which ascribed the multilocular forms to a morbid process arising in the stroma of the ovary, independently of the Graafian vesicles.

Under the second category there was a great variety and discrepancy of opinions.

With regard to the former, it had long been doubted whether the number of the Graafian follicles normally existing in the ovary was sufficient to account for the whole of the cysts sometimes found in these tumours; while the proof of any fresh formation of Graafian vesicles taking place in the adult had hitherto been of a very dubious kind, nor had any account been furnished of the mode in which secondary cyst formations proceed from them.

The author had studied these conditions in fifteen of the so-called "colloid cysts" of the ovary, for the opportunities of examining most of which he had been indebted to the kindness of Mr. Spencer Wells. He believed that all primary cysts of the ovary originate in the destruction of the ovum and subsequent accumulations of fluid in the follicle, the membrana granulosa acting as a secreting structure. From these cysts secondary cysts may originate in various ways, all of which, however, may be referred to one common type.

Class A. Cysts give off long tubular processes, lined by an epithelium similar to that of the cyst whence they spring; one cyst may give off two or three such processes at various parts of its circumference. These undergo constrictions in their course, and thus form secondary cysts. These processes and the cysts from which they spring are most easily found in the more dense parts of the stroma.

Class B. Thin-walled cysts give off diverticula analogous to those by which the lungs, the thyroid, and some other glandular organs, both of the gastro-pulmonary and genito-urinary system, originate in the embryo. These diverticula, which open by a narrow neck into the cavity of the parent cyst, expand as large pouches on its external surface, protruding into other and adjacent cysts. The neck may either expand into a large opening, or may become constricted, in which latter case the original communication is

destroyed. One cyst may in this manner give off numerous diverticula.

These varieties (A and B) usually coexist in different parts of the same tumour. They were found by the author in three out of the fifteen tumours examined by him. They give rise to very compound structures, but not to the dense masses to which the names of "alveolar degeneration," "cystoid disease," and "adenoid tumours" of the ovary have been given. This variety (or Class C) results from the formation, on the inner surface of the cyst wall, of a series of tubular glands, analogous to those of the uterus, or the crypts of Lieberkühn, or the glands of the stomach. They are formed by the (1) epithelium lining the parent cyst becoming stratified, and its superficial layers assuming a columnar character. (2) Into this stratified epithelium, papillæ formed of connective tissue spring from the stroma of the ovary, in each of which a loop of vessels is formed. A series of densely clustered villi is thus produced, which are converted into tubular glands by the growth upwards around these bases of the stroma of the ovary. The glands may become compound at their bases by secondary villi arising in them. They may be converted into simple cysts by the closure of their orifices; but more commonly the upward growth of the stroma surpasses that of the villi in which their summits end, and the glands become completely shut off and enclosed in the stroma, forming groups of a very compound form, of tubular structure, lined by a secreting epithelium embedded in the wall of the parent cyst. When distended by further secretion they form the smaller and larger multilocular cysts scattered on the inner wall of the parent cyst. Other modes of cyst formation resulting in dense cystoid masses were traced by the author to these structures.

Class D refers to the cyst found in the cauliflower papillary or dendritic growths which spring from the interior of parent cysts. These growths originate in a number of delicate papillæ growing from a common basis, and uniting to form large masses. They consist of a delicate stroma, derived from that of the parent cyst-wall, a loop of vessels, and a covering of epithelium. The irregularity of their growth causes spaces to be enclosed by them, lined by a secreting epithelium, and which, when completely shut off, become cysts. Various illustrations were given of this process. The author considered that in no case are the secondary cysts in the cauliflower growths of the ovary derived from single epithelium-cells.

The author then referred to the observations of Drs. Pflüger and Billroth on the origin of the Graafian follicles from tubular structures found in the embryonic condition of the ovary; and though not able fully to corroborate all Dr. Pflüger's views from his own observations, he had convinced himself that the Graafian follicles originate in tubular structures. He regarded these cysts as resulting from a renewal in the adult of the early mode of development of the Graafian vesicle with various morbid aberrations from the type of embryonic growth; and thinks they must therefore be placed in the same category with other cystic tumours growing in structures having tubular glands and ducts, especially with those of the mamma, testicle, and thyroid gland. He regarded the cysts mentioned under Class D as presenting essentially the same type, inasmuch as the large papillary and cauliflower masses can only be regarded, similarly to the Haversian fringes of synovial membranes, as everted glandular structures. He had not had any opportunities of examining any multilocular cysts of the ovary containing dermoid structures; but, inasmuch as these had been shown to contain both normal hair follicles and sebaceous and sudoriparous glands,—all of which structures are the frequent seat of cyst for-

mations,—he believed that they will be proved to follow the same laws of growth as the colloid cysts. The author, from chemical examinations of the fluid contents of the cysts, had been led to regard the so-called colloid matter found in them, as the result of alterations depending on the varying conditions of pressure under which they are secreted from the inner surface; and he believed that this matter cannot be considered as the result of any special form of degeneration of the tissue of the ovary.

The method which the author had pursued in studying the development of the cysts of the Classes A C D, had been to make sections in the recent state with a Valentin's knife through various parts of the stroma. The glands of Class C were best displayed by sections made vertically to the inner surface of the cyst-wall. Observations on Classes C and D were much facilitated by hardening the tissues in chromic acid solution of two per cent., and subsequently treating sections made by a sharp razor with liquor of soda and glycerine.

## Correspondence.

### ON CHLOROFORM ADMINISTRATION IN CONNECTION WITH MEDICAL EDUCATION.

SIR,—As house-surgeon and chloroform administrator to a large provincial hospital, I beg the insertion of a few remarks in our most useful JOURNAL.

Dr. Skinner, in his able letter of the 27th, has, I think, attached too great responsibility to the surgeon in operations under chloroform. I grant that the surgeon should assure himself that the patient is a fit subject to take chloroform; but after that, he must devote his entire energies to the performance of the operation; the rest must, of necessity, be left to the skill of the administrator.

Now, the questions arise: who are fit persons to administer? and how are they to receive the proper instruction? In London, unquestionably, a skilled administrator should be appointed to each hospital, whose duty it should be to give instruction to the students in the art of administration. In the provinces, the house-surgeons of the hospitals must necessarily administer chloroform, and a certificate of proficiency to perform that duty should be required before appointment.

At the hospital (one of the most famous in London), of which I was a student, the administration of chloroform was entrusted to a physician, a former student, not of the most amiable or communicative disposition: from him I never learned anything as to the mode or effects of its inhalation; in fact, not one student in a hundred ever had an opportunity of practical instruction in this all important province of medicine, involving the most fearful responsibility, and requiring often the keenest powers of observation and thought.

The education in our medical schools must be to the last degree faulty when, in order to pass examinations, it is considered essential to know botanical terms and microscopical chimeras (very pretty to quibble about), while, at the same time, except to a few in-patient dressers, the proper performance of operations on the living, the dressing of the wound, the administration of chloroform, are left to the eye of a special Providence to direct. Disaster, and its companions, disgrace and ruin, follow; and the anathemas of the public are heaped on the heads of victims to a false system of professional study. Mr.

Syme has conferred great benefits on the profession by urging the necessity of a more practical education for students of medicine.

No man of sense would attempt to controvert the necessity of a classical and scientific training for the medical practitioner; at the same time, all must yield that this should oppose no impediment to the acquisition of practical knowledge. Yet it is a notorious fact that the present system of lectures and examinations makes it impossible for the student to pass much time in the wards, or *post mortem* rooms. The consequence is, that the student leaves his hospital full of book learning, but ignorant of that practical work which is not only necessary for his own success, but also for the benefit, nay even the existence, of his patients.

Although I had been a clerk and dresser in London, when appointed to my present post I found myself grossly ignorant of the real practice of the profession; and it was only by great caution and care that I was able to avoid the most shameful and deplorable mistakes. How those few who have not had the advantages of a resident appointment in a hospital, the cases of professional incapacity that constantly present themselves at its doors sufficiently attest.

Finally, it should be made compulsory for every student to fill the office of in-patient dresser and clerk to a hospital before his diploma be granted; and I am of opinion, that the medical staffs of our schools of medicine neglect an imperative duty in not imparting a more practical knowledge to all their pupils.

I am, etc., A PROVINCIAL HOUSE-SURGEON.

August 31st, 1864.

## Medical News.

APOTHECARIES' HALL. On September 1st, the following Licentiates were admitted:—

Brantall, Sykes, Chiton  
Barton, William Samuel, Acacia Road, St. John's Wood  
Gillet, Charles Thomas, Lloyd Street, Lloyd Square  
Hickinbotham, James, Birmingham  
Hughes, David, Charing Cross Hospital  
Powne, Benjamin Lamb, Billingham, Lincolnshire  
Thornfield, Thomas Greenville, Broseley, Salop  
Vise, William Foster, Spalding, Lincolnshire

At the same Court, the following passed the first examination:—

Procter, Arthur Henry, St. Thomas's Hospital  
Rovers, Henry Cripps, St. Bartholomew's Hospital

### APPOINTMENTS.

#### POOR-LAW MEDICAL SERVICE.

BARTON, Thomas L. B., Esq., to the Melton Mowbray No. 1. and the Ashby-by-Lake Districts of the Melton Mowbray Union.  
DORRIS, William, Esq., to the Kirkby Thore District of the East Ward Union, Westmoreland.  
FOSTER, Gustavus, Esq., to the Pembridge District of the Kingston Union, Herefordshire.  
HARRISON, R. Esq., to the Ambleside District of the Kendal Union.  
LEWIS, W. T. Esq., to the Longdon District of the Leamington Union.  
LESNER, F. H., Esq., to District No. 2 of the Oberlin Union, Essex.  
LYSHER, C. E., M.D., to the Tenth Park Township Workhouse.  
MURRAY, Edward, Esq., to the St. George's District of the Township of Manchester.  
MORRISON, Thomas Fox, Esq., Assistant Medical Officer to the Tenth Park Township Workhouse.  
THOMSON, Henry, Esq., to the Bangor Dispensary District of the Newtownards Union, co. Down.  
WATKINS, Robert, M.D., to the East Radleigh District of the St. Thomas's Union, Devon.  
WILLIAMS, John F., Esq., to District No. 1 of the Mal'ton Union.

#### ROYAL NAVY.

AUSTEN, Josiah, Esq., Surgeon, to the *Columbine*.  
BAIN, Alexander G., Esq., Acting Assistant-Surgeon (additional), to the *Ducan*.  
BRADLEY, James, Esq., Assistant-Surgeon, to the *Chalcedon*.  
CARMICHAEL, William, M.D., Assistant-Surgeon, to the *Asia*, for temporary service in the *Enchantress*.



HATCH, Jeremiah A., Esq., Assistant-Surgeon, to the *Indus*.  
 LEVI, John S., M.D., Assistant-Surgeon, to the *Victory*, for service at Insular Hospital.  
 LEWIS, William J., Esq., Surgeon additional, to the *Duncan*.  
 MOORE, J. T., Esq., Assistant-Surgeon (additional), to the *Duncan*.  
 NUTT, C. K., Esq., to be Deputy Inspector-General of Hospitals and Fleets on the retired list.

#### VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

BRUCE, W., Esq., to be Surgeon 1st Administrative Brigade Caithness-shire A.V.  
 KEITH, W., M.D., to be Surgeon 1st Aberdeenshire R.V.  
 SINCLAIR, F. S., Esq., to be Assistant-Surgeon 1st Administrative Brigade Caithness-shire A.V.  
 SMITH, J. W. F., M.D., to be Assistant-Surg. 1st Aberdeenshire R.V.

#### MARRIAGE.

DATE, William, Esq., Surgeon, Ilkeston, to Mary, eldest daughter of \*Joseph John HORTON, Esq., Birmingham, at Aston, Birmingham, on September 5th. No cards.

#### DEATH.

MARTIN. On September 4th, at Abingdon, Berks, the wife of \*John F. Martin, Esq.

BEQUEST. The late Mr. William Salt, banker, has left by will to the Stafford Infirmary, and the Northern Dispensary, London, each £200.

DR. ST. HILAIRE lately died at Rochefort, at 90 years of age. All his life he had been in the navy. Twice he was made prisoner by the English, and was present at Trafalgar as surgeon of the *Achille*.

MR. BANTING, of the Obesity Movement notoriety, has offered £500 towards erecting a "Middlesex County Hospital." This donation is a thanksgiving for his cure as effected by "Bantingism."

CAVENDISH SOCIETY. The volume of Gmelin's *Chemistry* is now being issued to the subscribers for 1862. It brings the work down as far as bodies containing thirty-four atoms of carbon; and it is said that one more volume will complete the work. (*Chem. News*.)

DR. STEWART, an Edinburgh University graduate, has been made surgeon-general to the Paraguay army under President Lopez. He has several Englishmen already under him, and has lately been instructed to procure the services of three more English surgeons.

ACTING ASSISTANT-SURGEONS. The Adjutant-General informs general officers and officers commanding dépôt battalions, that the Duke of Cambridge has decided that it is not necessary for acting assistant-surgeons to wear uniform. Officers commanding dépôt battalions will therefore recognise these gentlemen in the performance of their duties, without being in uniform.

DISMISSED WITH DISGRACE. The following disgrace has fallen upon the United States army medical service. Brigadier-General W. A. Hammond, Surgeon-General to the United States, has been dismissed the service, and for ever disqualified from holding any office of profit or trust under the government of the United States. The following were among the charges of which he was found guilty. "That he corruptly induced the purveyor to buy, on government account, and at an exorbitant price, 7,677 pairs of blankets, which he had before refused to buy. That the Surgeon-General, well knowing that Wyeth and Brothers had furnished medical supplies inferior in quality, did give the medical purveyor at Philadelphia an order in writing to have constantly on hand hospital supplies of all kinds for 200,000 men for six months, and directed the medical purveyor to purchase a large amount thereof, including 273,000 dollars' worth, from Wyeth and Brothers."

WESTWARD HO! The *Dublin Medical Press* speaks very irreverently of the "Westward Ho!" movement of the *Lancet*. In it we read: "Under the sensation clap-trap heading of 'Westward Ho!' the *soi-disant* 'leading journal' of the tooth-brush and pomatum interest in England leads a crusade, having for its object the establishment of a wholesome market in diplomas open to all buyers. Some gentlemen have repudiated their allegiance to the King Log at Blackfriars, and presented themselves at the palatial gates of King Stork in Pall Mall. Their demand is that all apothecaries shall become *de facto* and *ex officio* physicians and licentiates of the College without examination. And this is the scheme which the *Lancet* lends its editorial thunders to help! Will the Medical Council recognise and register physicians made wholesale, and qualifications conferred by a president's pen, should the College succumb to the vituperative powers of the *Lancet*."

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE. The eighth annual meeting will be held in York from Thursday the 22nd to the 29th inst. Lord Brougham will preside. Sir Charles Hastings will take the chair of the health department. Since the meeting last year in Edinburgh, an important change has been made by the Council in the arrangement of business at the annual meetings. Special questions have been fixed upon by the standing committees for each department. These questions are each to occupy one day, not more than half the day being given up to the reading of papers thereupon, and the remainder being occupied by discussion. The special questions in the health department are as follows:—1. What are the best means for disposing of the sewage of towns? 2. What are the causes, and what are the means for the prevention, of excessive infant mortality? 3. What is the influence on health of the overcrowding of dwelling houses and workshops? and by what means could such overcrowding be prevented? The two remaining days will be devoted to voluntary papers. The local committees have been for some time past actively engaged in making the necessary preparations, and are anticipating a most successful meeting. The railway companies have liberally offered to take members to York and back at a single fare. An opening sermon by the Archbishop, a working men's meeting, a *conversazione*, and a banquet are among the attractions of the meeting. It is hoped that many members of the medical profession will support Sir Charles Hastings, and take part in discussing the very important questions which will come before the health department.

UTILISATION OF SEWAGE. The select committee appointed by the House of Commons on sewage and its utilisation have published their report. The committee has come to the conclusion that it is not only possible to utilise the sewage of towns, by conveying it, in a liquid state, through mains and pipes to the country, but that such an undertaking may be made to result in pecuniary benefit to the ratepayers of the towns whose sewage is thus utilised. The committee are of opinion that the completion of the outfall sewerage of the metropolis ought to be followed by the adoption of a system which may convert that sewage from a nuisance into a permanent and increasing source of agricultural fertility. The practice of conducting the sewage into the rivers should be discontinued. No efficient artificial method has been discovered to purify, for drinking and culinary purposes, water which has been once infected by town sewage. By no known mechanical or chemical means can such water be more than partially cleansed; it is always liable to putrefy again. Soils, and the roots of grow-

ing plants, have a great and rapid power of abstracting impurities from sewage water, and rendering it again innocuous and free from contamination. They recommend that completely freeing the entire basins of rivers from pollution should be rendered possible by general legislative enactment, including a provision for compelling local boards to render the sewage of their districts innocuous by application to the land for agricultural purposes. The case of the valley of the Thames (where the purification of the river, which has been sought by the expenditure of enormous sums, is, to a considerable extent, counteracted by the increased discharge of sewage from towns higher up the stream) requires special and immediate attention.

**THE HOSPITAL CONVENTION.** The International Congress, which has been sitting at Geneva with a view to regulate the position of hospitals and wounded in time of war, has terminated its labours; and the following ten resolutions have been adopted and signed, under reserve of ratification, by the representatives of Belgium, Baden, Denmark, Spain, France, Hesse, Italy, the Netherlands, Portugal, Prussia, Switzerland, and Wurtemberg:—"Art. 1. Ambulances and military hospitals are regarded as neutral, and, as such, protected and respected by the belligerents (so long as they contain sick or wounded). The neutrality would cease, should such hospitals have a military guard. 2. All *employés* of the hospital, including the almoners, carriers of the wounded, etc., will enjoy the benefits of this neutrality as long as there are wounded to be attended to. 3. The persons designated in the above article may, even after occupation by the enemy, continue to perform their duties in the hospital or ambulance to which they may be attached, or withdraw to join the division to which they may belong. When their functions shall have ceased, they will be escorted to the enemy's outposts by the army in occupation. 4. As the *matériel* of military hospitals comes under martial law, the persons attached to those hospitals may not, on leaving, take away with them anything except what is their own personal property. Under the same circumstances, however, an ambulance preserves its *matériel*. 5. Inhabitants of the country, who give help to the wounded, are respected and remain free. The generals of the belligerent powers are called upon to forewarn the inhabitants of the call made upon their humanity, and of the neutrality consequent thereupon. Any wounded man taken into a house will be its safeguard. Any inhabitant who has taken in the wounded will not be billeted upon or submitted to war contributions. 6. The wounded or sick are taken care of, no matter to what nation they belong. Those will be sent back to their homes who, after being cured, are deemed incapable of further service. The others may also be sent home, but on the condition of not resuming arms during the war. The escorts on this service are to be respected as neutrals. The commanders-in-chief have the power to hand over to the enemy's outposts the wounded during the combat, when circumstance permit it, and with the consent of both parties. 7. A distinct flag and uniform is adopted for the hospitals, ambulances, and escorts. On all occasions, the national flag must accompany it. A badge may also be allowed to denote a neutral, to be granted only by the military authorities. The flag and badge will bear a red cross on a white ground. 8. The general detail of these regulations will be settled by the commanding officers of the belligerent powers, according to the instructions from their governments." Article 9 calls the attention of other governments to this convention, inviting them to join it. Article 10 states that the ratification of this convention is to take

place at Berne within four months, or earlier if possible.

### OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.  
TUESDAY....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
SATURDAY....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

### TO CORRESPONDENTS.

\*• All letters and communications for the JOURNAL to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE LANCET AND THE MSS.—The remark "breach of faith on the part of its agent or reporter", were the words of Dr. Humphry, not ours.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—George May, Esq. (Reading), 5s.; W. H. Moxhay, Esq. (Reading), 5s.; I. Harrison, Esq. (Reading), 10s.; J. W. Workman, Esq. (Reading), 10s.; T. L. Walford, Esq. (Reading), 5s.; F. Workman, Esq. (Reading), 5s.; W. B. Young, Esq. (Reading), £1:1; James Taylor, Esq. (Wargrave), 10s.; J. Joseph Hinton, Esq. (Bath), 10s. Amount previously announced, £57:1. Received at the Lancet office, £3:11.

Erratum in last impression. Read "E. Richardson, Esq., 10s. 6d.", instead of 10s.

I am, etc.,

ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.  
145, Bishopsgate Street Without, September 7th, 1864.

STATISTICS OF OVARICTOMY.—SIR: In reply to the note of Dr. Routh, published at page 290 of your last number, I beg to send you the following statement of the results of all my cases of ovariectomy in hospital and private practice.

Hospital.—Cases, 57. Recovered, 49. Died, 17. Mortality per cent., 29.83.

Private.—Cases, 49. Recovered, 39. Died, 10. Mortality per cent., 20.41.

Total.—Cases, 106. Recovered, 70. Died, 36. Mortality per cent., 33.96.

Full details of all my hospital cases, except the last successful case, have been already published, and of all my private cases up to March 1863. Since then, I have not published any details of private cases (although I have given the results from time to time to different societies and inquirers), because I wished to give them more fully than can be done in the space easily obtained in the journals. But they are now nearly ready for the printer; and I have assured Mr. Churchill that it will not be my fault if my work on the *Diagnosis and Treatment of Diseases of the Ovaries* is not at the service of my professional brethren in November next.

I am, etc., T. SPENCER WELLS.

3, Upper Grosvenor Street, September 3rd, 1864.

COMMUNICATIONS have been received from:—Mr. J. Vose Solomon; Mr. J. Blackburn; Dr. A. E. Sansom; Mr. John F. Martin; Dr. J. Fitzpatrick; Dr. R. Fowler; Mr. Richard Griffin; Mr. Eddowes; Dr. R. C. Holland; Mr. T. Spencer Wells; Mr. Carter; Mr. Lawson; Dr. B. W. Richardson; Dr. Basham; Dr. Down; and Mr. T. Watkin Williams.

### BOOKS RECEIVED.

1. Outlines of Surgical Diagnosis. By George H. B. Macleod, M.D. London: 1864.
2. Practical Observations on Diphtheria and Erysipelas. By C. Bell, M.D. London: 1864.



# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

### ON TRACHEOTOMY IN DIPHTHERIA.

By GEORGE BUCHANAN, A.M., M.D., Surgeon and  
Lecturer on Clinical Surgery, Glasgow  
Royal Infirmary, etc.

THE subject to which I desire to draw your attention for a little time is, the Surgical Treatment of Diphtheria in its later stages. The wide-spread prevalence of this disease in many districts, its great fatality, and the inefficacy of medical treatment after it has advanced to a certain point, are sufficient inducements for us to consider how far surgical interference is called for in cases which would otherwise end in death.

In the allied affection, attended with plastic exudation into the air-passages—croup—there can be no doubt that, in the suffocative stage, tracheotomy is the only resource, and has proved so valuable in the hands of most practitioners, that it is a recognised proceeding in surgery; the only question in reference to it being, whether the French surgeons do not resort to it too early as a means of treatment, or the British delay too long to afford its performance a fair chance of success. My own opinion is, that there is a median line, towards which our continental *confrères* should recede and we should advance, to place the operation on its proper footing.

While, however, this operation has been long resorted to in croup, it is only recently that it has been introduced and practised in the now more common disease, diphtheria. I do not wish to enter on the medical treatment of this affection at all; for, in truth, my experience is very limited. As I do not engage in general practice, I never see the disease at the outset; and it is only when the medical treatment has been unavailing, that my surgical opinion is called for by the family attendant. But one thing seems obvious to me; that, notwithstanding the most judicious management, many cases advance from bad to worse, until death appears imminent.

Diphtheria is often regarded as a general disease, manifesting itself locally by exudation of albuminous or fibrinous matter on the fauces, just as scarlatina is accompanied by tonsillitis and measles by catarrh. For practical purposes, it seems to me that this affection may be considered as presenting itself in the sthenic or in the asthenic form. In the sthenic variety, there is a certain amount of fever, rarely amounting to that of croup, but simulating an attack of ordinary tonsillitis. Soon a patch of tough white membrane appears on the tonsil, and rapidly spreads around over the whole fauces, and extends into the larynx and trachea. As soon as the exudation has extended into the larynx, the symptoms suddenly assume the character of those of an advanced stage of croup. The crowing respiration, the paroxysmal spasms, the agony of approaching suffocation, the violent tossing and gasping of the sufferer, bear a close resemblance to that most painful of sights to a medical man—a little child, which a few hours ago was in good health and strength, suffocated by a

croupy effusion. Up till this time, the patient may have a good pulse, and, in the intervals of the spasm, may sit up and appear comparatively well; at least, in many cases it is so.

In the asthenic form, the constitutional predominate over the local symptoms. There is debility from the very outset—a general *malaise*, unwillingness and sometimes incapacity to swallow food; which latter symptom often is the first indication for the medical man to examine the throat, when he discovers the white patch which pronounces the disease diphtheria. Sometimes the disease proves fatal before the effusion has spread to any great extent; at others, the whole mouth and fauces become covered with exudation, which then spreads to the air-passages. When it does so, the symptoms of suffocation supervene, and the fatal result is hastened.

I have described two typical forms of diphtheria; but it is not often that we find cases so well marked as to be referred at once to either class. It is during the progress of the malady, which may run its course rapidly in a few hours, or may extend over several days or weeks, that one can observe in what way it is likely to prove fatal, if its progress be unchecked. In cases which resist medical treatment, then, death occurs from asthenia, or from apnoea; and it is most important to watch for indications of either result from the very first. But I do not hesitate to affirm that, in a great majority of instances, the immediate cause of death is suffocation by the false membrane. Under such circumstances, tracheotomy is the only resource; and in proof that it is not only warranted, but may be practised with a reasonable expectation of success, I may be permitted to adduce the following examples.

CASE I. John M., aged 4, began to complain of sore-throat on the 11th of May, 1863; and on the 13th was visited by Dr. Gray, who at once pronounced the disease to be diphtheria. A white exudation coated the fauces and back of the tongue. Emetics of ipecacuanha were first administered; and subsequently bichromate of potash, and also a gargle of chlorate of potash. Under this treatment, the child got nearly well. On the 20th, however, he complained of pain in the throat, with some difficulty in breathing, which was not relieved by an emetic of ipecacuanha. On the morning of the 21st, there were distinct symptoms of exudation in the larynx and trachea; and the distress in breathing rapidly got worse towards evening. I was called at half-past 10 p.m., and found Drs. Gray and Burns in attendance. The little patient was in great distress, tossing in bed in the agony of obstructed respiration, which was accompanied with hoarse stridor. It was quite plain that suffocation was impending. The gentlemen in attendance had already told the parents that life could not be prolonged beyond an hour or two without surgical interference—a statement in which I fully agreed. I performed the operation with great caution, fearing hæmorrhage from the swollen state of the veins of the neck. One vein, which lay across the seat of incision, was cut and tied; and, when the bleeding had ceased, I opened the trachea, and inserted a double tube. Nothing could be more satisfactory than the instant relief to all the distressing symptoms. Presently the child swallowed a few spoonfuls of milk, and soon fell asleep, breathing quite quietly. A young medical friend took charge of the case during the night; and when I visited, at six next morning, I was rejoiced to find everything going on well. However, I was so anxious that the tube should be properly managed, that I told the case to my students, some of whom kindly volunteered their services; and from the date of the operation, for six days, a medical attendant was by the bedside day-

and night. The inner tube became stopped up with a clear viscid secretion at intervals of an hour or two, but was readily extracted and cleaned. Milk and beef-tea in small quantities were given, and easily swallowed. On the sixth day, the secretion had become so scanty and thin, that I removed the tubes, and found that the breathing was quite free, going on through both wound and mouth. Next day, his voice was audible. For a few days, mucus was expelled, during coughing, through the tracheal wound; but by the fourteenth day it was filled up, and the little fellow rapidly regained strength.

CASE II. J. A., aged 2 years and 3 months, was attacked with symptoms of diphtheria on the 24th of August, 1863. The family medical attendant treated it by the local application of nitrate of silver, and the administration of chlorate of potash. In two days the disease had subsided, and the patches had disappeared from the throat; whilst the child became quite lively. On the 27th, however, he became worse; and on the 28th the larynx was evidently invaded by the exudation. On the evening of the same day, when I was called, it was quite evident that the disease had made rapid progress. The dyspnoea was urgent, the child tossing about in great uneasiness, and occasionally gasping for breath. There was but one opinion, that, without operation, the patient had only an hour or two to live; and the parents at once consented. I performed tracheotomy, with a most satisfactory result; for in a few minutes the little sufferer was lying quiet, breathing easily, and much relieved in every way. The double cannula-tube was easily introduced and retained. During the night, milk and beef-tea were given, and readily swallowed. On the fifth day, the tube was removed; and breathing went on easily through the wound, and also by the nose and mouth. Nothing untoward occurred; the child made a rapid recovery.

CASE III. T. Cleland, aged 6 years, was seized with symptoms of diphtheria on the 7th of February, 1864. Patches of white exudation were visible on the tonsils and fauces. He was treated by inhalation of steam and application of hot fomentations, and the administration of chlorate of potash. On the 11th, the disease had extended to the larynx; and he was then placed under my care. He was removed to a private room in the infirmary, in order that he might be under the immediate care of my assistant and dressers. On admission, at 2 P.M., the respiration was hurried, difficult, and stridulous; face flushed; pulse 120, full. As his strength was good, I ordered an emetic of ipecacuanha, to be followed by repeated doses of iodide of potassium. At 6 P.M., the breathing was more impeded, but pulse still good. The emetic was repeated. At 9 P.M., the dyspnoea was so urgent, and the spasmodic stridor so much increased, that his face became almost livid; and in a paroxysm he sprang out of bed, and appeared on the point of suffocation. I at once decided on performing tracheotomy. The operation was accomplished with great difficulty, owing to his struggles, and the occurrence of several spasms during the manipulation. The neck also was very vascular; and there was considerable hæmorrhage from a distended vein, which I secured before opening the trachea. The tube, however, was safely introduced, when the struggles at once ceased, and breathing became tranquil. A large quantity of tough exudation was coughed and pulled out of the wound, after which the air-passage seemed completely clear of obstruction. On the 12th and 13th, he was remarkably well; but, on the 14th, was feverish, with a white tongue and rapid pulse. On the 15th, the skin was covered with a bright eruption of scarlatina; but he was more comfortable since the eruption appeared. On the 17th, he was progressing

favourably; and, as all uneasiness connected with the tube had gone off, it was removed without any bad consequences. On the 25th, the wound was nearly closed, and he could speak and whistle. Next day, he was allowed to go into the ward; but he caught cold, and general anasarca made its appearance. He was again confined to bed, and kept warm with plenty of blankets; and the heat of the room was raised. He got occasional doses of castor oil; and in a few days the anasarca began to disappear. On the 19th of March, he was dismissed cured.

This case is peculiarly interesting, from the occurrence of scarlatina, and then anasarca, to complicate the operation; and would lead me to believe that the existence of scarlatina, at least in a mild form, ought not to be considered a contraindication to tracheotomy, if it supervened on an attack of croup or diphtheria which threatened death by suffocation.

CASE IV. W. R., aged 3 years, began to show signs of being ill for some days before medical assistance was called for. On the 18th of March, 1864, Dr. C. was asked to attend, when he found the whole back part of the mouth covered with diphtheritic exudation. The treatment consisted in supporting the system, and using chlorate of potash and dilute mineral acids. He continued to improve a little each day till the 22nd, when the larynx was evidently invaded. Treatment was continued for twenty-four hours longer; but, on the evening of the 23rd, the obstruction to respiration became so great that I was sent for. I found marked evidence of considerable laryngeal and tracheal effusion. The stridor was continuous, and the agony great; the face was cold, and lips bluish. I at once performed tracheotomy, with the most marked relief of all symptoms. The tube was introduced; and, as usual in these cases, the child fell asleep in half an hour after the operation. Everything went on satisfactorily; so that, on the evening of the 27th, I removed the tube, and left him breathing quietly through the wound and mouth. Next morning, he was quite well and lively, playing about the bed, and took breakfast with great relish. About midday, while running about the room, he suddenly felt a choking sensation, and became very pale. Dr. C., who happened to be in the vicinity, was called at once; and, on his arrival, found the child just on the point of death. Indeed, he died in a minute or two afterwards. The wound seemed free from obstruction, and the exudation had disappeared from the fauces altogether. The cause of death was not ascertained.

CASE V. J. R., aged 5 years, became ill on the 21st of February, 1864. On the 24th, the medical attendant was called, and found her suffering from diphtheria. Treatment was continued till the 29th, when the larynx was invaded by the exudation. At this time I was asked to see her; and it was apparent from the dyspnoea, stridor, and often recurring spasm, that, without surgical interference, death was at hand. I therefore performed tracheotomy very carefully, when, on introducing the tube, instant relief was afforded to all the distressing symptoms. She continued to progress favourably till the 2nd of March, when the disease appeared to have attacked the lower part of the trachea. Respiration became more and more obstructed till the 4th, when she died.

I need not detain my hearers with accounts of cases. I have given examples of the operation, with favourable and unfavourable results. I have performed tracheotomy now twenty-one times. Seven of the patients recovered, and fourteen died. But it is improper to judge of its value from such limited statistics. In the hands of surgeons who have had larger experience, the mortality seems to be about three out of four operations. Even among the



French, who resort to it much earlier, the average success is one in four. So, then, in the view of numerical statistics, the results are not very encouraging. But I have all along held that this, of all surgical operations, is not to be tested by statistics. It is to be borne in mind, that the disease for which it is practised is a most dangerous one, and, at the stage of obstructed respiration, is almost certainly fatal. The question, then, is: When it has advanced beyond the control of medicine, can the surgeon hold out a hope of life? Has the operation saved the lives of any whose case has become hopeless? That it has done so is beyond doubt; and that it would be still more valuable I have no hesitation in believing, if it were firmly pressed on the parents at a suitable stage.

The operation for strangulated inguinal hernia is a very successful one, if resorted to immediately after a fair trial of the taxis has failed in reducing the tumour; but, if delayed for twelve or twenty-four hours, it becomes a vast deal more dangerous. Do we, therefore, hesitate to give the patient the benefit of our surgical operation, because he will not yield to our representation at the first? And would we be justified in collecting our statistics from those cases in which strangulation has existed longer than we desire?

In diphtheria, the average success of tracheotomy is not the question; but, Can we save lives which would otherwise be lost? When I first performed this operation in diphtheria, I was afraid that the general disease would be a contraindication to its performance; but experience has shown that it may be performed with safety and success, whether the primary disease has been croup or the other. I would not perform it in a case where the vital powers were completely prostrated by the pre-existing malady; in other words, where the patient was dying of asthenia. Approaching suffocation, with fair strength, is the proper indication.

Even in the cases which ultimately proved fatal, the relief to the urgent dyspnoea was sufficient to warrant the operation; and to show that, if performed at the proper time, there is a fair chance of success. It is a very remarkable thing, which I have observed in almost every instance, that as soon as the operation is safely concluded, and the tube lodged in the trachea, the child falls asleep, apparently worn out by the previous restlessness and want of sleep, which has been the most distressing symptom for the twenty-four or forty-eight hours preceding; the tranquillity of the respiration affording a rest to the exhausted powers of the sufferer. When the operation fails to afford permanent relief, death rarely occurs from suffocation, but usually the child dies from exhaustion—a much less painful and harassing mode of death than the fearful struggles which precede death from suffocation. In this lower view, I think the operation is warranted.

But the important question is, Could we not save more lives by performing the operation earlier in the disease? It seems undoubted that, when symptoms of laryngeal complication occur, the hope of recovery is but small. No doubt, isolated cases do occur; but I appeal to the experience of those who have seen a great deal of this disease, whether recovery is not a rare thing after we are satisfied that the exudation has spread into the air-passages. The great object of treatment is to subdue the disease before this has occurred; and in a great majority of cases, under proper management, the symptoms will yield and disappear; but in others it will advance, notwithstanding the most sedulous attention, and prove fatal in a very large number, as the returns of the Registrar-General will show. In an advanced stage,

it is not very difficult to assert that the case will certainly prove fatal; and even then, if the tendency to death is by apnoea, more than asthenia, the operation ought to be had recourse to without delay.

But I believe that, in an earlier stage than this, the operation would be much more successful. When the medical treatment has been fairly tried, and failed to arrest the disease; when the respiration begins to be laboured and crowing—the result of exudation into the larynx—then, I think, is the time to operate. In almost all cases, the symptoms become aggravated; and the strength is worn out by the struggle before the relief is given, if not taken at that point. I am convinced that further experience will enable medical men to ascertain a stage at which the operation will be justifiable, with a fair prospect of success.

The operation is one that every practitioner ought to hold himself prepared to undertake on an emergency; still it is one difficult of execution, and to be gone about with great caution. In children, the trachea lies very deep; and the encroachment of the thymus gland from below, and the isthmus of the thyroid from above, leave a very small space in which the incision can with safety be made. The continual movements of the trachea, caused by the obstructed respiration, render it difficult to be reached with safety. The steps of the operation should be proceeded with, quietly, calmly, slowly, and with great regularity. The operator should dissect carefully down to the trachea. Layer after layer of tissue must be carefully divided, and held aside till the rings of the trachea can be seen clearly at the bottom of the wound. Any bleeding must be arrested before the opening is made. When the tracheal rings are fairly exposed, a sharp hook is to be placed at the upper part, and a bistoury plunged firmly into the tube, and made to cut a slit nearly a quarter of an inch long. After the spasm attending the opening has subsided, the tube can usually be easily introduced.

In the after management of the case, the points I have found most essential are, to keep the tube clear; to diffuse some steam through the apartment; and to give milk or beef-tea, and perhaps a little wine or some kind of fluid nourishment. The trachea soon becomes tolerant of the tube, which can be retained five or even seven days, if need be.

## ON SOME POINTS IN THE TREATMENT OF DIABETES.

By FRANCIS EDMUND ANSTIE, M.D.

I wish to call the attention of the members of the Association to one or two practical matters in connection with diabetes.

The fact has long been recognised, that great good may be effected by the regular use of a diet in which the nitrogenous matters shall be represented, for the most part, by meat, and the hydrogen and carbon by some form of oily food. It is necessary to avoid the administration of the hydrates of carbon which enter into the composition of any ordinary diet; since, in the peculiar state of the system which distinguishes this disease, unchanged sugar would be left to circulate in such large proportions in the systemic blood, that the latter fluid would infallibly exert an irritant influence on the kidney, and provoke a saccharine diuresis. Hydrogen and carbon must, therefore, be administered in the form of oil or fat rather than of starch or sugar; and it has been stated that it is not only necessary to adopt this kind of regimen; but that the stomachs of diabetic patients easily ac-

cept oleaginous food. I have to notice a class of cases in which this does not take place.

During the last four or five years, I have met with several instances in which sufferers from diabetes not only did not readily accept, but positively loathed almost every kind of oleaginous food which could be proposed to them. This singular loathing of an aliment which is especially necessary for the patient's welfare, reminds us of the similar peculiarity which Dr. Edward Smith has noted in a large proportion of phthisical persons, and which Dr. Radcliffe has observed in the sufferers from neuralgia. It is to be met with firmness and perseverance on the part of the medical attendant, who must try one form of fatty food after another, till he does find one which the patient will take. In several instances, I have tried everything in vain; till, at last, pure cream, taken in pretty large quantity, has fulfilled the desired indication. In another case, the almond biscuits proposed by Dr. Pavy answered very well.

It may seem almost unnecessary to insist on the necessity of this particular portion of the dietary treatment; but, in truth, it is often neglected; and I am anxious to call attention to the evil consequences of such neglect. These are, of course, partly seen in the emaciation of the patient; but by far the most serious effect is the severe nervous distress which soon begins to afflict him. Nearly all these cases are distinguished by a persistent and most troublesome insomnia; and I have now attended several such patients in whom this condition had brought about the habit of opium-eating. The effect of this practice upon diabetic patients is so peculiar, that I think it worth while to relate some of the observations on this point which I have made.

The sufferer from diabetes quickly finds out that a small dose of opium is of no good to him; the fact being that, with the abnormal flow of urine which constantly goes on, a considerable proportion of each dose is quickly eliminated from the system. Accordingly, he quickly advances to the use of a quantity of opium equivalent, perhaps, to from four or five to twenty grains daily. Having found the level of opium-consumption which gives him comfort, he does not necessarily increase the dose any further; but remains, perhaps, stationary for many months, or even years, at the same dose.

Now, this is, doubtless, an unsatisfactory and undesirable condition for a patient to get into; but I wish to direct attention to the fact that where once the habit has been fully formed, and the daily *quantum* of opium is not being increased, the medical attendant incurs much risk if he suddenly cut it off. Under such circumstances, both the nervous distress and the excretion of sugar are apt to increase to an alarming extent.

On the other hand, there is no doubt in my mind that, where the patient has advanced to the use of truly narcotic doses of opium (a fact which may be known by his suffering distinct depression and languor, with great contraction of the pupils, about half an hour after taking a dose), he is putting himself in no little peril. True narcotic or paralyzing action has always a tendency to aggravate diabetes; and opium, given in large doses, shares, in this respect, the properties of the anaesthetics, chloroform and ether. Whenever, therefore, the patient informs us that he has carried opium-eating to an extent which involves any depressive effects, we are bound to interfere at once.

The only true substitute for narcotic-stimulants, where a diabetic patient has got to rely upon them, is the speedy adoption of a dietary calculated to improve the special nutrition of the nervous system. It is here that we particularly need to insist upon the

use of a high proportion of fatty ingredients in the daily food, and (where the stomach will bear it) the medicinal employment of cod-liver oil. There is one other ingredient of nervous tissue, which is, also, not improbably indicated in these cases—I mean phosphorus. Acting on this idea, I have several times administered this remedy, with decidedly good effect; the form which I have selected is that of the hypophosphite of soda or lime, which I agree with Dr. Radcliffe in believing to be by far the most efficient preparation of phosphorus, where we desire a food-tonic to the nervous system.

I stated that the habit of opium-eating, where the doses have not been carried to a large extent, and have remained stationary for some time, is not to be rashly interfered with; at least, till a greatly improved scale of dietary has been established. The truth appears to be that the instinct of opium-eating, dangerous as it may be, is one which has not unfrequently arrested disease at a critical moment when it was about to assume a new and more serious development. It is well known that this practice has a tendency to arrest commencing phthisis; and there is little doubt that, when not carried to excess, it has had this effect in the case of diabetic patients, who, from defective diet and other sources of depression, would almost infallibly have developed tubercle. The true moral of this observation should be an increased solicitude for that sort of improvement in the nutrition of the patient which would do away with the nervous distress, which is, after all, the central and most threatening feature in the clinical history of diabetes; and in comparison with which, the elimination of sugar and the waste of fatty tissues are but secondary and unimportant matters. If these brief observations have any effect in enforcing this important maxim, the frequent neglect of which has been exemplified by cases which have come under my notice, both in private and in hospital practice, the purpose of this paper will be answered. A considerable proportion of diabetic patients are, I imagine, practically starved; and this notwithstanding a nominally high standard of diet; simply from the need of a more plentiful supply of fat than is administered to them. Mere animal diet, or animal diet *plus* gluten bread and the less starchy vegetables, will not fill the place of this—nor will anything else.

**OVERCROWDING.** Dr. S. Gibbon, medical officer of health of the Holborn district, in his Eighth Annual Report just issued, makes the following remarks touching overcrowding in dwelling houses. "Patriots and philanthropists cannot, in my opinion, devote their superfluous means to a better purpose than the erection of suitable dwellings for their poor, and, in this respect, helpless neighbours. Charitable doles, even when given in the form of education and medical relief, are apt to undermine the independence, and, in a degree, demoralise the recipients. These and the like are matters in which the artisan, earning from 15s. to 30s. or 40s. a week can and will, in a measure, help himself; but it is quite out of the question to expect him, in London at least, to erect a suitable dwelling for himself and his family. When I go, as of late I frequently have done, into a small three-roomed house and see seven young families huddled together as closely, and almost as promiscuously as sheep in a fold, I ask myself, what can the church and its agencies, the school, the dispensary, or even the reformatory, do for the members of a household thus educated? The influence of these agencies, excellent as they are in themselves, are as mere palliatives and patchwork compared with the influence of giving to each young couple at least one room, with the appliances necessary for health and cleanliness."



# Illustrations OF HOSPITAL PRACTICE: METROPOLITAN AND PROVINCIAL.

## BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE SURGICAL TREATMENT OF GLAUCOMA AND  
GLAUCOMOID TENSION WITHOUT IRIDECTOMY.

Under the care of J. VOSE SOLOMON, F.R.C.S.

[Continued from page 239.]

CASE III. *Chronic (non-inflammatory?) Glaucoma of Left Eye treated by Paracentesis of the Cornea: Vision much Improved. Enucleation of the Right Globe, which was staphylomatous, disorganised, and blind.* (From notes by Mr. Arthur Braeey, House-Surgeon.) Jas. Dixon, aged 42, a plumber, was admitted October 18th, 1863, suffering from chronic glaucoma; and cachexia, a result of asthma, which has been persistent for many years. The right eye has been disorganised by glaucomatous degeneration. It is blind, hard as a stone (T 3); the sclerotic is thin, and bulged in the centre. The disease commenced Christmas 1862, with dimness of vision and iridescent vision. The eye got gradually worse, and in six or eight months ("the following summer") all perception of light was lost. The left showed symptoms of disease soon after the first was affected. The vision was dull; a halo surrounded a candle-flame; and, on dark afternoons, he was practically blind, all objects appearing as shadows only. The tension was great (T 2½). The left optic disc was of a slate or grey colour; the sclero-choroid foramen was much widened out; cupping was not apparent; but there was a deep shadow on the disc. The retinal veins were large, more especially the upper branch; the arteries were very small. He could not see to read or write. The temporal field of vision was nine inches.

On October 24th and November 17th, paracentesis was performed; and on the 24th, the patient consented to the removal of the right globe. Neither chloroform nor ether was administered, in consequence of the general emphysema of the lungs.

Dec. 1st. He read minion type (Jaeger's No. 4). The patient attributed his improvement to the removal of the disorganised eye. He read and wrote for his amusement.

Dec. 18th. Paracentesis of the cornea was performed.

Dec. 20th. There was much tension.

Dec. 24th. He read pearl type (Jaeger's No. 2) with ease.

Jan. 15th, 1864. Tension was reduced to 1. He read No. 2, and, with a convex glass of 16", brilliant type (or Jaeger's No. 1). The lateral field of vision on the temporal side was more than three feet; on the nasal side, it was eleven inches. He complained of a musca interfering with the field of vision.

Feb. 2nd. The tension had increased the last few days. The musca, which was of the size of a small fly, was now, he said, as big as a butterfly. He read No. 2, and No. 1 with a convex glass. When standing at a distance of eighteen inches from the patient's eye, the nasal field measured fourteen inches, and the temporal more than three feet.

Feb. 15th. He read, unaided by glasses, No. 1 imperfectly; No. 2 with facility.

May 13th. Tension is as on admission; viz., T 2½. The field of vision is the same as on February 2nd.

With a thirty-inch double convex, he reads brilliant type (No. 1) without difficulty. Although considerable attention has been given to his asthma, and he has been taken into the hospital from time to time for the advantages of temperature and diet, etc., his general appearance is as shattered as on his first admission.

This man, with two cases in which iridectomy had been performed, was presented to the Midland Medical Society.

CASE IV. *Sympathetic Internal Ophthalmia, with Glaucomoid Tension (T 2½). Intraocular Myotomy, followed by Cure.* T. B., a brass-founder, aged 58, had the left eye destroyed by a traumatic ophthalmia, which excited a sympathetic choroido-iritis in the right. The disorganised globe was enucleated on July 9th, 1861.

July 23rd. The right eye was very tense (T 2½), but not of stony hardness. He could not distinguish features, or see to cut his own food. The iris responded freely to atropine. Under the ophthalmoscope, the lens-capsule exhibited a granular and speckled appearance from exudation into its intracapsular cells; the vitreous humour was too turbid to admit of the fundus being seen.

Intraocular myotomy was at once performed; and, in seven days afterwards (July 30th), the patient read small pica (Jaeger's No. 8) with a sixteen-inch convex glass. In two days later (August 2nd), he was submitted again to an ophthalmoscopic examination, when the vitreous humour was found clear, and the optic disc and retinal circulation were readily focused. The lens-capsule had still a granular aspect, although perhaps less so than before the operation. On the 9th of August, the patient, with the aid of the spectacles which it had been his habit to wear for the last twelve months, read bourgeois type (Jaeger's No. 4).

Among the early effects of the treatment was a restoration of the natural elasticity of the globe, which has, I believe, proved permanent. At the end of August, the man resumed his work.

It is curious that, after the intraocular myotomy, his old spectacles occasioned no inconvenience whatever, presenting, in this respect, one of the several paradoxes which meet investigators of optical accommodation.

In the following case, the state of the optical accommodation, before and after section of the ciliary structures, has been noted.

CASE V. *Glaucomoid Tension (T 2½) of the Right Eye; Intraocular Myotomy; Cure. Synechia Posterior of the Left. Iridectomy; Cure. State of Accommodation and Vision before and after Operation.* Emma B., aged 39, was admitted with subacute corneitis and irido-choroiditis (specific) of the right eye, on February 28th, 1862. In the left were numerous and broad adhesions of the iris to the lens (synechia posterior), but no inflammation. She was suffering, at the time of her admission, from severe ptialism and great physical weakness. The right eye had been diseased since two weeks after Christmas 1861; and the left, two weeks before. After the employment of tonics and chlorate of potash, with residence in a pure air, she could read, on May 23rd, Jaeger's No. 12, or great primer, with either eye; nothing smaller. She was highly presbyopic. The right globe was very tense (T 2½); and the ophthalmoscope showed the vitreous body to be diffusely turbid, and the vessels of the retina very minute. Intraocular myotomy was performed on May 31st, with a view to reduce tension, and to improve the state of the vitreous body, and the circulation of the choroid and retina. A small bit of the left iris was removed in an outward and downward direction, so as to restore the communication be-

tween the two chambers to a more physiological condition.

In six days (June 6th), the tension of the right was normal, and brilliant type (Jaeger's No. 1) read by it at seven inches. No. 4 (Jaeger's) was the smallest type read by the left. No. 12 (great primer) was now comfortably read at twelve inches instead of twenty-one, indicating an increase of the curve of the cornea.

June 18th. The limits of distinct vision were, for No. 1, six and eleven inches respectively; for small pica (Jaeger's No. 8), five inches and twenty-one respectively. With the right eye, which was the best, a fine needle could be threaded. Features were clear at a normal distance.

I have not heard of this patient since the end of 1862, at which date no deterioration had taken place in her visual power. There was no relapse of tension when she last was seen.

[To be continued.]

## Transactions of Branches.

### MIDLAND BRANCH.

#### PRESIDENT'S ADDRESS.

By W. H. RANSON, M.D., Nottingham.

[Delivered at Nottingham, June 2nd, 1861.]

GENTLEMEN,—Let me first express my thanks for the undeserved honour which has been conferred upon me by placing me here, and next entreat your forbearance with my shortcomings. When, in accordance with the custom on these occasions, I had to prepare an address, I soon found that a discursive *résumé* would be uncongenial; I, therefore, ventured to introduce an innovation, and now offer to you instead, a communication upon a subject of some interest in clinical medicine. I trust that, by so doing, I may give satisfaction to many of my hearers; but should any regret this change of a previous custom, I throw myself on their mercy.

The subject which I have selected to introduce to your notice is that of Diphtheria; a malady which, although not a new one to the world, has recently come upon us in an epidemic form, after so long an absence as to be new to the experience of the present generation of medical men in this country. I purpose to illustrate the malady by relating some of the cases which have come under my notice in this part of England; and to discuss some of the points of interest which those cases may raise, relative to its pathology and treatment.

The first case which I saw, and it was, I think, the first which occurred in this district, was in the spring of 1857. A young lady, of about 15 years of age, residing under conditions eminently conducive to health, in a detached house, and not having had any discoverable communication with persons who had had a similar affection, was attacked with tonsillitis. The disease was soon characterised by white patches, or false membrane, fœtor of breath, enlarged cervical glands, general subcutaneous swelling of the neck, and febrile disturbance of a grave kind. Swallowing was difficult, painful, and often followed by coughing. The breathing became impeded; the signs and symptoms of implication of the glottis and larynx became marked; and the danger of immediate death was so great, that recourse was had to tracheotomy. It seemed to afford only a brief respite to the suffering from impending suffocation, and she passed away.

In this case, the early symptoms were not such as to excite alarm; and, there not then being any reason

to suspect the serious nature of the malady, she was not visited for six days after the first indications of sore-throat. During that time, great progress had been made; and, when the fauces were examined, the greyish-white false membrane covered the whole of the visible interior of the throat. This insidious character of the disease has been noticed by many observers. A fuller description, as seen later on in the epidemic, is given in the following cases.

CASE 1. Georgina Hill, aged 18, was admitted into the hospital on April 28th, 1858, with diphtheria.

History. The only important fact was, that she had had scarlet fever.

The present illness began three days before admission, with soreness of throat and some sickly feeling, not preceded by or accompanied with chills, rigors, or decided fever. There had been no known communication with other cases of diphtheria.

Present State. April 29th. She was a healthy looking girl, complaining of slight sore-throat. She was quite collected and calm; swallowed a good draught, but coughed a little after it sometimes. She spoke with difficulty; the voice was altered, but not hoarse. There was moderate swelling of the neck about the angles of the jaws; some fœtor of the breath. In the mouth were seen white patches here and there upon the gums, which were swollen. There was great swelling of the soft palate and tonsils, which were partially covered by a greyish white false membrane. There was a dark patch in the centre of the hard palate, which, together with the lateral swelling and the natural narrowness of her mouth, reminded one of a split palate. Pulse 144; skin moist and warm. Bowels freely open; urine depositing lithates. She was given bark and ammonia, and the following gargle.

R. Sodæ bîboratis gr. 60; potassæ chloratis gr. 180; acidî hydrochloric. dil. ʒiiss; mellis ʒi; aquæ ad ʒviil. M. Fiat gargarisma.

To be frequently used.

In the evening, she was no better; the throat more swollen. It became evident that, in the ordinary way of gargling, a very small part of the inflamed throat was reached by the gargle. She was, therefore, directed to drink a portion each time she gargled, in the hope that by this method a local action might be obtained as far as the disease extended.

April 30th. She passed a restless night; rambled a little, but only while dozing. She thought herself to-day a little better. The breathing was noisy and pharyngeal, not at all croupy. Irritable cough came on every now and then, apparently from the secretions of the inflamed pharynx trickling down and irritating the glottis. This cough was worse when she lay on her back. There was less swelling of the soft palate. There was commencing separation of the membranous deposit. The posterior wall of the pharynx was visible, partially covered by false membrane. Bowels not open. Pulse 120. She was directed to use the gargle every half hour, and to swallow one tablespoonful each time.

May 1. She had some delirium at times, even when waking. There was less swelling in the neck. She swallowed pretty well; and said she felt better. Pharyngeal respiration was not so noisy. She had had a little puriform discharge from the nostrils. There was less swelling internally; and one could see well into the pharynx, which was less covered by false membrane, as also the palate and tonsils. She coughed less after drinking. Bowels open; appetite returning. Pulse 134.

May 2nd. For twelve hours after the last visit, the delirium continued with hallucinations; not frightful, but annoying, visions beset her and made her restless, but neither unhappy nor violent. She was or-



dered to diminish the quantity of the gargle, and was given a little more wine. She passed a better night, and to-day was better in every way; swallowed and breathed better, coughed less. The inside of the throat was red, and rapidly cleaning. There was slight puriform discharge from one ear; none from nostrils. Pulse 120.

May 5th. She continued to improve. Pulse 84. She was ordered to have chop and light pudding.

May 22nd. She was convalescent, and made an out-patient.

CASE II. George H. Hammond, aged 11, was admitted into the hospital on Dec. 17th, 1858. The disease commenced four days previously, with pain in swallowing, without prior chills or febrile symptoms. The pain increased; swelling appeared in the neck; and then he became feverish. He had redness and slight swelling of the whole fauces; a whitish false membrane lined the pharynx; and a patch was on the uvula. The layer was not thick; but the patches were large. The voice was but little better than a whisper, and tended to wheeze. The breathing was quiet. He swallowed fluids very well, and the last drops did not cause cough. He could not swallow solids. Pulse 132. He was ordered good fluid diet, and the gargle of chlorate of potash, etc.—a teaspoonful to be swallowed every half hour. A portion of the white false membrane was scraped off and examined microscopically. It consisted in the main of molecular fibrine, interspersed with groups of pus-like corpuscles, some scaly epithelium, and a little blood. There were no spores like those met with in aphtha.

December 18th. He was better. The false membrane had not extended, and seemed a little thinner and softer.

December 19th. The general redness and swelling of the fauces were much less; the false membrane much less extended. Skin cool. Pulse 96.

December 20th. He was better. Small separate white patches were seen on each side of the base of the uvula, each surrounded by a red border. The fauces and pharynx were nearly free from deposit. Two or three little white patches were seen on the lower gums, and one or two smaller still upon the tip of the tongue. The white patches from the gums were examined microscopically, and consisted of scaly epithelium; a thick layer rendered opaque by molecular matter in or upon the cells; also, numerous freely moving vibriones, and the molecular matrix in which these arise. There were no spores or filaments comparable to oidium. He had no febrile heat. Pulse 84. He asked for bread. He coughed in the night somewhat, and had now a little pain about the hyoid bone; yet the voice was not much amiss; the breathing was easy, and free from laryngeal quality. The urine was alkaline, not albuminous. He was ordered to have the mixture every hour only; to take two drachms of castor-oil; and was allowed to have bread.

December 21st. He coughed five or six times in the night, violently, and without expectoration. This cough was not excited by swallowing. The voice sounded normal, and the breathing not laryngeal. He swallowed well; asked for meat, and was allowed it. He was ordered to take the mixture every half hour by day and every two hours by night.

December 22nd. He had a good night, without cough. There still continued a patch or two of white membrane about the base of the uvula; and this, when he retched, was seen to be continuous with a thicker similar layer behind the soft palate. As this part was not touched by the medicine while swallowing, he was directed to continue it every two hours, and to have some poured down the nostril, using this

route alternately with the mouth, in order that the mixture might come into contact with the patches behind the uvula.

December 24th. Although the patches above described about the back of the velum and base of the uvula had remained almost stationary for two or three days, yet, within twelve hours of the use of the mixture by the nostril, a very decided amendment was visible. To-day, the throat was nearly well, and the patient felt able to do any ordinary duties. The medicine was omitted.

He was made an out-patient on the 28th; seen occasionally up to February 18th, 1859; and then discharged cured; having never suffered from any secondary paralytic affection.

The following case illustrates a more severe variety of the disease.

CASE III. Matilda T., aged 8 years. The illness began without traceable cause on January 15th, 1859, with chills, followed on the next day by feverishness and a sore-throat.

When seen, on January 17th, the tonsils were very red and much swollen; and upon them were patches of milk-white false membrane. There were moderate tenderness and swelling in the neck; the fever was not great.

She was treated with the chlorate of potash and hydrochloric acid mixture before mentioned (two teaspoonful every half hour).

In this case, there was an unusual pain in swallowing, felt principally about the level of the hyoid bone; and, this being excited more by the mixture than by anything else, it was never so freely and persistently taken as I wished, although, by great perseverance, several bottles were swallowed. During the next three days, the fever increased, and was marked by intense restlessness and some delirium with visions. The pain excited by attempts to swallow increased, until she refused everything on the 21st. At this time, the white deposit had spread, so as to form a continuous covering for the fauces and pharynx as far as I could see; it was, however, always pulpy. She seemed worn out and sleepy; there was a copious puriform discharge from the nostrils and noisy pharyngeal rattle, but no true laryngeal or croupy breathing, voice, or cough. For twelve hours, she took nothing; she slept a little, and then swallowed a little nourishment, which throughout consisted principally of milk. Swallowing was still intensely painful; she longed to drink, but dared not. She took some chlorate of potash dissolved in milk without other medicine, and a little tincture of sesquichloride of iron. She began to amend soon afterwards. Throughout, there was no foetor, and but little external swelling. The pain gradually diminished; the discharge from the nostrils and mouth became less; she raised a few soft bits of false membrane, consisting, in the main, of exudation-corpuscles and epithelium, with spores like *oidium albicans*. By the 31st, she was convalescent. The urine during the first few days only was slightly albuminous.

A week or so after convalescence, she had a slight relapse of feverishness; the face had a blank look, and the eyes stared and squinted a little. She recovered without any more decided paralysis, under the continued use of tincture of sesquichloride of iron. The urine was again tested for albumen during the relapse, without finding any.

The next two cases are given to illustrate a very mild form, which seems to recover under any or no treatment.

CASE IV. John Harrison, aged 62, after having been for three weeks in the hospital for a surgical affection requiring operation, was doing well until February 17th, 1859. He then began to have sore-

throat, with slight tenderness externally, and redness and swelling internally of limited amount; there were several spots of whitish deposit scattered over the fauces and pharynx. He was treated by a gargle of alum and dilute sulphuric acid, with simple saline mixture. Four days later, the white patches were gone, and the throat nearly well. He said that he never had scarlet fever, and that sore throats were not prevalent in the village from which he came.

In this case, the false membrane, examined by the microscope, consisted of numerous pus-like corpuscles, with a little molecular matter and numerous scaly epithelium-cells; also many growing spores resembling oidium, but no jointed filaments.

CASE V. Catherine Clews, aged 14, after having been in the hospital one month with hip-joint disease, and while doing well as far as the surgical malady was concerned, began on February 14th, 1859, to have sore-throat. Whitish false membranes rapidly formed, so as to cover the fauces and pharynx as far as one could see. The swelling both inside and out was considerable, and the pain severe. She was treated by the mixture of chlorate of potash and dilute hydrochloric acid, which was used also as gargle, and by a mixture containing tincture of sesquichloride of iron and dilute hydrochloric acid. She got nearly well in four days, and by that time the white false membrane had disappeared, and there remained only a little tenderness and swelling externally. She had never had scarlet fever. There was no rash.

The following are cases of the paralytic sequelæ of diphtheria.

CASE VI. Richard M., aged 34, groom, was admitted into the hospital August 10th, 1858, having suffered two months previously from a sore-throat, with pain in swallowing and hoarseness of voice. The wife saw patches of a white colour on his tonsils, and she herself spat up "bits of white skin," having had the sore-throat at the same time. One child suffered similarly at the same time; the two others escaped (these details are mentioned to shew that he had had diphtheria).

August 10th, 1858. At the date of admission, he had difficulty in swallowing, especially fluids, which excited cough. The voice was hoarse and nasal. He had some pain in the abdomen going through to the back, without tenderness. His eyes were staring; face pale. He was very feeble and somewhat agitated; bowels open; appetite good, even craving. Nothing of note was observed on examining the throat. At this date, I was not familiar with this singular form of palsy. He was ordered to take fifteen minims of the syrup of iodide of iron three times a day; to have compound iodine ointment applied to the neck; and solution of nitrate of silver (ten grains to an ounce) on a probang to the pharynx daily.

August 19th. There was no material change. The œsophagus was explored by a bougie in consequence of a sense of obstruction he complained of; but none was met with. Violent spasmodic cough was excited, and a suffocative sensation, which also was excited after each use of the caustic solution (it seemed as if the glottis did not close as the probang bearing the caustic solution approached, and hence some of the fluid entered it). The caustic solution was ordered to be omitted, and a gargle of chlorate of potash (half an ounce to twelve ounces of water) was given instead. After this, the power of swallowing gradually improved.

August 21st. He complained much of numbness in the hands, feet, and head, which had increased gradually since it began; as had also the epigastric and dorsal pain; for which, on September 5th, a blister was applied with benefit.

September 8th. He was worse as to the weakness

and numbness of the extremities. Silk between his fingers was mistaken for paper, his eyes being shut; and slight touches upon his legs and toes were unfelt. Painful sensations were distinct enough. He fell if he attempted to walk, and turned in bed with the greatest difficulty. Vision was impaired, a mist being before the eyes. His mental faculties were unimpaired. He swallowed much better, but warm things still with difficulty. His voice was shaky and cracked. A blister was ordered to be applied to the nape of the neck; and an ounce of the following mixture to be taken three times a day.

R Potassii iodidi ʒi; decoct. cinchon. ʒxij.

September 14th. The numbness in the right hand and arm was less than in the left. Slight touches on the pulps of the fingers were not felt. When blindfolded, he was quite unable to move promptly and direct accurately the hands or index fingers. He could not bring them together without a great effort, even when looking at them; thus he had a loss of muscular sense as well as of muscular power. Tactile sensibility was perfect on the head, face, neck, and shoulders, and on the arms as low as the insertion of the coraco-brachialis muscle; below that point, touch was impaired gradually, more so downwards. On the anterior surface of the trunk, the sense of touch was normal as low as the xiphoid cartilage; then gradually more impaired downwards to the feet. On the posterior surface of the trunk, sensation was normal as low down as the crests of the ilia; but below that part, gradually more impaired downwards. From the calf downwards, the anterior and posterior surfaces seemed alike. The extremities, both upper and lower, were cold, especially where the sensation was most impaired. There was some tenderness on percussion over the spines of the seventh, eighth, and ninth dorsal vertebra, and also about the middle of the cervical region, where he had often a pain, relieved by stooping the head. Deglutition, speech, and vision, were better. The skin was moist all over. Pulse 84; urine normal; bowels open. He was ordered to have a blister between the shoulders; and two ounces of wine daily.

September 23rd. The feet and legs were better as to sensation and motion; the arms and hands no better. There were tenderness and a little pain about the ends of the fingers, just under the nails, the matrix of which and the pulps of the fingers were red, although he still could not feel a moderate touch on them. He had occasional twitchings in both hands and arms; a slight rigidity of the fingers and inability to extend them. The mixture was omitted.

R Ferri et strychniæ citratis gr. v.; aquæ ʒi. M. Fiat haustus.

To be taken three times a day.

September 25th. The paralysis and anaesthesia were worse in the legs and arms. He had difficulty in passing urine; and was obliged to force and strain; there was a little pain above the pubes. He had some occasional dyspnoea with tendency to sigh.

September 27th. The bowels had not been open for three days. He was ordered to take ten grains of compound colocynth pill immediately; and to have an enema in the evening.

September 30th. In the course of last night, the right arm became worse, both as to sensation and motion, so that he could not lift it. The bowels were still obstinate. He was ordered to have every night ten grains of compound colocynth pill; to omit the iron and strychnia, and to recur to the mixture of cinchona and iodide of potassium.

October 2nd. The bowels could not be made to act without an injection. He was ordered to continue the medicine and pills, and have an injection daily.

October 9th. He was worse in the upper extremi-



ties; unable to move either hand to the head. Anæsthesia was not so much increased as the paralysis; he could feel a few fine hairs placed between his finger and thumb. The loss of sensation was greatest in the hands; but another spot of greatest numbness was found near the right elbow. In the lower extremities, the anæsthesia was greatest also at the distal parts. He used his legs vigorously in bed, and walked with assistance. He had a sore feeling at the soles of the feet, with acute pain and prickling when touched. There was a similar state in the palms of the hands and between the fingers, so that gently moving the hand caused him to cry out. There was no visible redness or other change in the parts thus exquisitely sensitive to pain and insensible to tactile impressions. The use of the word "anæsthesia" for this state of things may reasonably be criticised.

October 20th. He was better altogether; stronger, had more colour, was stouter, and moved the arms more vigorously, especially the left, the hands remaining flexed and rigid. The tactile sensibility was no better. The pulps of his fingers were touched, decidedly without his feeling it; but an attempt to seize them with but moderate firmness caused unendurable pain, especially near the ends of the nails, where also he had pain without being touched. His fingers could not be straightened from the intensity of the pain. The legs were stronger; but in the feet he had the same loss of tactile sensibility, and the same pain and tenderness as in the hands. Respiration, speech, and deglutition, were nearly normal. The medicine was omitted; and he was ordered to have ten minims of tincture of sesquichloride of iron three times a day.

October 25th. He was much better.

October 30th. He was much better; grasped and felt small objects.

November 15th. He was much better, and walked about well. He now felt a single hair between the finger and thumb, although he had a sensation in the hands which he called numbness. This single hair was not easily felt by a healthy person. There was slight swelling of the legs and feet. The urine was not albuminous.

November 27th. He was much better. There was still some swelling of the legs, but they did not pit on pressure. It appeared to be rather in the muscles of the leg, which were tender on pressure; and a somewhat similar state was found in one arm. He was made an out-patient, and recovered by slow degrees.

The son of this patient was in the hospital at the same time with very similar symptoms, and nearly as severe, after a slight diphtheria. He was discharged cured, able to feel a single fine hair, on October 30th, *i.e.*, after eighty-one days' treatment, for the first month with syrup of iodide of iron, and for the rest of the time with tincture of sesquichloride of iron. He also had one blister applied to the nape of the neck.

The following case is remarkable for its extreme severity.

CASE VII. William P., aged 14. The only important fact in his history was, that he had fits in childhood. His present illness began September 21st, 1859, with slight swelling of the neck, followed by pain in swallowing. The inside of the throat was described as ulcerated in "rags"; and he spat up "bits of white skin." He was treated by the insufflation of powdered alum and other household remedies, without consulting a medical man. He went out daily, and in ten days was convalescent. After an interval of ten days, he began to have a nasal intonation of the voice. Four days later, there was difficulty in swallowing soft things, while hard things were easier to

get down. There was failure of the legs in walking, and a blank stare about the eyes. Four days later, after a walk, he had a fit of some kind, ushered in by a sensation as of stoppage of the heart's action and loss of sight; he was for some minutes unconscious, and the limbs were stiff. During the same day, he had several repetitions of the initiatory stage of the fit. During the same night there came on a sensation of tingling and numbness in the hands; and gradually after this, he partially lost the tactile sensibility of the hands and feet, as well as the motor power of the trunk and extremities.

November 1st. He moved about the room with difficulty. The paralysis above mentioned was irregularly distributed in the parts affected. The pharynx and soft palate failed to act, so that he could not swallow solids; and fluids for the most part returned by the nose and caused cough. He could not clear the throat; hence there remained in the pharynx a great deal of mucus, evidenced by the rale. He had an irritable cough, but no physical sign of mischief in the thorax. He squinted, and saw double; near objects were more indistinct than distant ones. The muscles which support the spine were much weakened; but those which effect inspiration seemed natural. The mental faculties were clear. The treatment consisted of fluid nourishment, and ten minims of tincture of the sesquichloride of iron every four hours.

After this date he gradually got worse. The palsy increased to an alarming degree. From the difficulty in swallowing, the liability of the glottis to be irritated by the pharyngeal mucus and by the drinks, increased so as to become itself a source of danger.

At the worst period of the illness (about November 18th), he took, in forty-eight hours only, about four ounces of fluid, swallowed by a few drops at a time. For one month the voice was without sound; the movements of the lips alone indicated his wishes. The hands lay almost powerless, and the legs quite so, so that on one occasion his foot was burned by a hot bottle, he being unable either to move the foot or call for aid. The trunk was as powerless as the arms; and the head fell about like that of an infant. Once in this state he was nearly suffocated, by a slight sickness coming on as he lay on his back, when, he being unable either to turn or to empty the mouth, or obtain help, a little fluid passed into the larynx, excited a spasmodic cough, and gave rise to a local inflammation which was not subdued for several days. The muscular sense was entirely lost, at least in parts; so that on one occasion, his arm being above his head while he believed it to be at his side, he moved it by a great effort, and was quite startled by its appearing before his eyes from an unexpected direction. The tactile sensibility was never quite lost in the parts affected, but was much impaired; the fingers had the feeling, when touching an object, as if he had a thick glove on. The sensibility to painful impressions was excessive; he could not bear to be turned in bed without calling out. The coats of the bowels seemed partly paralysed; no aperients acted without the help of a clyster. The heart throughout acted weakly and irregularly. The hearing was too acute. Micturition and respiration were well performed. By slow degrees he got better; the voice returned; the swallowing improved; and the power of moving was restored; but it was not until the new year that he was brought downstairs; and three months more elapsed before he was well. He continued to take the iron, doubling the dose after the first few days.

At the time of my first seeing the case, the patient and those around him made no mention of the previous attack of sore-throat, until particular inquiries were made, to which I was led by observing the cha-

acter of the paralysis. This point is important to notice, for it not unfrequently happens; and we are called on then to treat a sequel, the origin of which, having been slight, has been forgotten. We may then, unless acquainted with the distinctive characters of this form of palsy, mistake the case for disease of the nervous centres. Thus, in the spring of 1860, I saw a case of suspected cerebral disease. A child was observed to stagger in walking, falter in speech, squint, and stare in a peculiar blank manner. The intellectual faculties were probably not impaired; but the shyness of the little sufferer made it difficult to affirm or deny this point. It was, however, made out that the loss of motor power was accompanied by numbness and tingling; that it varied much in extent and intensity; was patchy as to its distribution; and in no way defined as to its limits in the way we know to occur in the various diseases of the brain or spinal cord. Then a careful inquiry elicited the information, that some weeks previously the child had had a sore-throat; that such sore-throats had been epidemic in the village; and that a medical man who had seen these cases declared them to be diphtheria. A hopeful prognosis was given. Tincture of the sesquichloride of iron was prescribed, and recovery took place very soon after.

I cannot forbear to mention briefly another case, which was most probably one of diphtheritic paralysis. A young and otherwise healthy man was under my care in the hospital for two months with aphonia, which seemed causeless. The laryngoscope shewed no local mischief, except a very large wide and rather insensible glottis. At length he was questioned as to diphtheria; and it came out that he had suffered from a sore-throat which had been epidemic. He was given the tincture of the muriate of iron, and soon quite recovered.

CASE VIII. Eliza Swindon, aged 30, was admitted to the hospital January 8th, 1859, complaining of a difficulty of swallowing. Her present illness began eleven weeks before admission with rigors, general pains, and headache. The next day the throat seemed "made up." For two or three days she had external swelling in the neck and raised fetid slime, and some pieces of "white skin." A few days later, fluids returned by the nose while drinking. On December 6th, she was at my house, and complained of a sense of obstruction to the passage of food, about the lower border of the pharynx. Convulsive cough was excited by attempts to swallow. The voice had the peculiar nasal quality. Nothing of moment was seen on examining the interior of the throat; and at this time she had no paralytic symptoms in the extremities. She was then treated by tincture of sesquichloride of iron and the gargle of chlorate of potash.

December 26th. The report says: "able to swallow better; voice improved, but not able to drink warm fluids at all; cold she manages better." There were tingling and numbness of feet and hands, and weakness of the legs in walking, and of the hands in holding, so that heavy articles dropped from the grasp. She spat in a morning thick whitish slime, which, examined by the microscope, consisted of flakes of semi-solid muco-pus, i.e., cohering pus-corpuscles in a scanty matrix resembling mucus; these were suspended in a more fluid clear viscid mucus. She was directed to continue the sesquichloride of iron, and to omit the gargle.

January 8th. She could swallow solids or fluids pretty well, and looked well. The mucous membrane lining the fauces and pharynx was rather too red, but not otherwise abnormal. The epiglottis was easily visible, rather injected and swollen, and covered with a thick creamy slime. Her voice was weak, not hoarse. She could drink cold things well; warm things caused

cough. She had some sensation of numbness in the extremities, but thought the power of movement was quite natural. The urine was not albuminous; it was alkaline in reaction. She was ordered to continue the tincture of sesquichloride of iron, and to have the pharynx touched once daily with a solution of nitrate of silver, of ten grains to an ounce of water.

January 22. She was much better; swallowed hot and cold things equally well. The voice was a little cracked and hoarse. Some creamy slime was seen trickling from the posterior nares; and she had bled a little from the nose. There was some slight remnant of anæsthesia in the hands.

In this case the application of the caustic solution did not excite the same violent convulsive cough and suffocation which it had done in Case vi.

February 8th. She was discharged cured.

This patient, when first she applied for relief, complained of symptoms which suggested rather a stricture of the gullet with spasm, than paralysis. The coexistence of spasm of neighbouring muscular structure, with paralysis of the pharyngeal muscles, is not uncommon in these cases; and these symptoms are the more apt to mislead, as some bloody mucus may be raised, and the patient gives, as in this case, no history of previous diphtheria, unless in answer to special inquiries.

CASE IX. Ruth H., aged 21, was admitted into the General Hospital, Nottingham, June 8th, 1858, having had diphtheria, which had commenced six weeks previously, and in which attack I had seen her in consultation. For one week the disease had been severe; after which she gradually improved, but the power of swallowing never became quite right. For fourteen days before admission she had cough on drinking, with a sensation as if something were sticking in her throat at all times.

June 8th, 1858. At the date of admission, she could scarcely swallow anything, being in this respect much worse than she had been after the first week of the illness. Solids seemed to stick; and fluids returned through the nose, giving rise to violent coughing. On inspection, I saw nothing to account for these symptoms; and doubtless overlooked the immobility of the soft palate. There was some swelling of the glands of the neck still remaining; but it was not clear that a part of this was not of ancient date. A probang met with slight obstruction at the lower border of the pharynx; and the discharge upon it was muco-pus streaked with blood.

She was treated with iodine to the neck externally; and a solution of nitrate of silver upon a probang was applied to the outlet of the pharynx every other day; two grains of quinine were taken three times a day.

Fourteen days later, she could swallow solids or fluids without difficulty. She was observed for a month longer, and then discharged cured.

It may be, that in this case, and in the previous one, there was no remaining superficial inflammation of the mucous membrane of the pharynx and posterior nares, other than was excited by the violent convulsive efforts which followed attempts to swallow; still the fact is of some interest, that exudation, which could only have been the result of some inflammation, was met with in both cases, both from the pharynx near its lowest border, and also trickling down from the posterior nares. It has been attempted to prove that this paralysis is often due to prolonged nasal diphtheria. It is certain that, it first begins in many cases in the throat, and it is interesting therefore to mark these indications of inflammatory action in the parts.

CASE X. John H., aged 46, innkeeper, a stout healthy man, was first seen February 25th, 1859. Eight weeks previously he had a slight sore-throat, in which no



deposits were seen. He made a good recovery; but the voice remained nasal. Six weeks later, he began to have numbness in the feet and weakness of the legs. These symptoms were now much increased; and the arms were similarly affected; in both upper and lower extremities the loss of sensation and motion was most marked at the distal ends. There was no other discoverable symptoms of cerebral or spinal lesion; no cardiac affection; there was slight oedema of the legs, but no albumen in the urine. He had no anæmia. Nutrition was normal. There was no pain anywhere. He was ordered twenty minims of tincture of muriate of iron every four hours.

The paralysis spread for a week or two, until he was confined to bed, and unable to turn over without assistance. The urine was again examined a month later, still without finding any albumen. He made a good recovery after a tedious illness of about two months.

This case exhibits the non-dependence of this form of palsy either on anæmia or albuminuria. The patient also made no mention of the previous sore-throat until questioned on the point.

CASE XI. Laura W., aged 15, a school-girl of moderately good health, in December 1859 had slight sore-throat. The medical attendant doubted whether it was diphtheritic or not. She made a good recovery; but began six weeks later to have a difficulty in swallowing, a tendency of fluids to return by the nose, and a sensation of numbness of the feet, afterwards of the hands also.

March 16th, 1859. When first seen, she had partial loss of power of motion and of tactile sensibility, limited to the distal portions of the legs and arms, variable in these parts as to the seat of greatest intensity. The extremities were cold and slightly livid. The urine was slightly albuminous, depositing no casts of the tubes. There was a little oedema of the ankles, and great pallor of face. She was ordered eight minims of tincture of muriate of iron every four hours, and strong solution of iodine to the spine daily.

She continued in this state, varying very much, for two or three weeks, and then began to amend. It was noted on March 29th, that the paralysis of motion and sensation was frequently shifting, and varying in intensity; a circumstance to which Trousseau has drawn attention. There were some pain and tenderness on pressure, with redness of the soles of feet and toes. The iron was doubled, and the iodine lotion omitted. The urine was not albuminous.

She improved gradually after this date, recovering the sense of touch faster than the power of motion and the muscular sense. She made by degrees a perfect recovery.

This case contrasts with the preceding, inasmuch as albuminuria and anæmia were both present, but clearly were not essentials, only coexisting. The lividity of the paralysed parts was very striking in this case.

I have twenty-eight cases of diphtheria recorded, and nine cases of slight sore-throat occurring under conditions which left no doubt that they were caused by the diphtheritic miasm, whatever that may be.

In the whole 37 cases, eight deaths occurred; all but one (aged 15) under five years of age. In three of the eight fatal cases, tracheotomy was performed. In all the eight cases, death was due to implication of the larynx: in three of these, I was not sure whether by extension from the pharynx, or by independent origination in the larynx, the croupy symptoms having been amongst the earliest which presented themselves. Indeed, these three cases were such as would a few years ago have unhesitatingly been designated croup; but the existence of some false membranes in

the pharynx, and the prevalence of diphtheria in the immediate neighbourhood, induced me to include them in this paper.

Six of the eight fatal cases were not seen until after the extension of the inflammation to the larynx.

Excluding the nine cases of trivial diphtheritic sore-throat, there were twenty recoveries; and of these, fifteen had some paralytic sequelæ. Nor can this be said to include all, for some of the remainder were not observed long enough; and I have certainly seen slight cases of secondary paralysis, which would have escaped notice, had they not been specially sought for.

No sequelæ were observed in any of the nine trivial cases of diphtheritic sore-throat.

That we have in diphtheria to do with a specific febrile disease is, I think manifest, and has been sufficiently demonstrated. The secondary symptoms are so characteristic as to suffice of themselves to distinguish this malady from all others, and, in conjunction with its general history, to establish the claim of diphtheria to be considered an acute specific disease, having for its usual, but not constant anatomical expression, an inflammation of the lining membrane of the throat, which terminates by exudation on the surface, at the same time that it profoundly affects the whole system in a manner peculiar to itself. I cannot, therefore, in any manner yield assent to the argument recently put forth by a writer in the *BRITISH MEDICAL JOURNAL*, that diphtheria has no separate existence as a disease, and is, as it were, but a mere quality of several maladies.

The following observations relate to the morbid anatomy of diphtheria.

I examined a membranous tube coughed up by a child, G. Parr, who had diphtheria in January 1858, and which seemed to be a tolerably good cast of a part of the oesophagus. The mass of the membrane was made up of molecular fibrillated matrix not distinguishable from fibrine, imbedded in which, but very variously distributed, were numerous exudation-corpuscles not distinguishable from pus, and near the attached surface of the membrane groups of fusiform cells and fibre-cells. The free surface showed distinctly the openings of the glandular tubules, had a smooth surface, and was quite denuded of epithelium. The casts of the gland-tubules were elongated a little at their attached ends, and near to them were found highly organised elements from the true mucous membrane, which seemed to have been torn away with the cast. Thus the membrane seems to be an ordinary fibrinous exudation beneath the epithelium, and to have at certain points such intimate adherence to the mucous membrane, that it cannot be separated from it without laceration.

Samuel Issett, aged 16 months, died of diphtheria, so mild for the first week that no medical man was consulted, and so severe at the last that death took place within twenty-four hours after he was first seen, with all the symptoms of croup,\* and with visible false membranes in the pharynx, and swelling of the glands in the neck. A *post mortem* examination was made, and the pharynx was seen lined with a white membranous exudation from its upper to its lower border, gradually becoming thinner near its lower termination. A few small patches of the mucous membrane alone uncovered, and these were intensely red. The membrane was continued, though thinner, over the margins of the glottis and epiglottis (the mucous membrane of which was swollen and red) into the larynx to its lower margin, where it was softer and thinner.

The microscopic examination confirmed that made

\* The mother refused to permit tracheotomy to be performed.

in the case of G. P. The epithelium was found on the free surface of the exudation in sections made at the edge of a patch, elsewhere it was absent.

I will not say more on the question of the morbid anatomy of diphtheria, than that it presents structurally nothing which distinguishes it from other allied inflammations, and hitherto no parasitic organism has been met with in it which is constant in its presence or peculiar to it. I cannot, therefore, agree with the suggestion thrown out by Professor Laycock that, diphtheria may possibly depend on *oidium albicans*, however strongly I incline to the general doctrine, that, in all diseases which are propagated by a morbid poison capable of increase within the bodies of the sick, the morbid poison is some organised being; and for this reason, that the power of reproduction is restricted to organised beings.

It must not be supposed that, because the development of a pellicular inflammation in the throat or elsewhere is the leading characteristic of diphtheria, it is alone diagnostic of that disease. The truth is, that many forms of superficial inflammation of the lining membrane of the throat or mouth result in a membraniform exudation, not anatomically distinguishable from that found in diphtheria. Bretonneau showed that this resulted from the application of a solution of cantharidine in oil, or from strong caustics, acids, etc. It certainly results from the other specific acute diseases, which often are accompanied by inflammation of the throat, as scarlet-fever and measles; and must be looked upon as merely the result of an inflammation of the mucous membrane, of a certain degree of intensity, perhaps also requiring a particular quality.

Pathologically, there is small difference between the false membranes of diphtheria and those of pleurisy; and still less between them and the fibrinous casts from plastic bronchitis or those occurring in dysentery. It is surprising that Bretonneau, who recognised this tendency of other acute inflammations of the throat to result in the formation of false membranes, should still have reasoned too much as if to find a false membrane in a throat were to prove a case diphtheria.

There must remain, however, always a certain difficulty in the diagnosis, if we refuse to accept the existence of false membranes as pathognomonic; nor can this be entirely removed. Clinically, the same difficulty occurs too often in many maladies; yet we do not doubt the existence of those maladies. Nevertheless, the general course of the disease, the tendency of the inflammation of the mucous membrane to spread and attack the windpipe, will usually suffice to convince the observant practitioner.

Not only is the formation of a false membrane not restricted to the specific inflammation of diphtheria, but diphtheria may attack the throat, and give rise to no visible pseudo-membranous exudation. I have seen in one family, among persons exposed to the poison while nursing a child sick with diphtheria, four cases of sore-throat, without any exudation; and in another smaller family, two such sore-throats clearly due to the diphtheritic poison, yet free from white patches. Every one who has seen much of this disease has remarked upon the prevalence of mild sore-throats during epidemics; and mixed up with the severer cases, it is probable that many of these are of the same kind as those referred to above, which, occurring as they did precisely in those members of the household most liable to suffer, in consequence of their ages or the amount of exposure, left no doubt in my mind that they were cases of true mild diphtheria. I have spoken of these previously as the nine cases of diphtheritic sore-throat.

The name of this disease has, I think, done some-

thing to fix too much attention upon the merely local anatomical character; and although I do not doubt that diphtheria and scarlet-fever or measles may co-exist, I cannot help but object to the adjective use of the term in such phrases as "diphtheritic scarlet-fever," used as if to signify scarlet-fever having a tendency to diphtheria, yet not complicated with it. In these cases, I conceive, we have either scarlatina accompanied (as I have myself witnessed) with a membranous exudation on the tonsils and soft palate; or scarlet-fever and diphtheria coexisting in the same person, which I have not seen, at least so as to be able to verify it. It may be, that by some persons the word diphtheritic is used in the sense in which it is employed by pathologists, to signify merely a membranous deposit, without implying any necessary connection with the acute specific disease diphtheria. This, however, is open to the objection that the expression is very liable to misinterpretation. These views include a denial of the supposed alliance, almost amounting to essential identity of scarlet-fever and diphtheria. Drs. Greenhow, Jenner, and others, have disposed of this question; and it would lead me too far to attempt to refute in detail the arguments of those who support such alliance.

The relations of croup and diphtheria are, however, more obscure; and I do not feel in a position to express a positive opinion on this head. English writers generally deny, and French writers for the greater part affirm their identity; and it must be said, that the proof is pretty strong that some at least of the epidemics which have been called croup in past times were diphtheria, and for the remainder it may be said that the question has still to be worked out. I incline, myself, to the view that there is a sporadic inflammatory affection of the larynx and trachea, terminating in the formation of false membrane, quite different in its essentials from diphtheria, to which we may give the name croup; but that it is difficult or impossible sometimes to distinguish it at the bed side from the sporadic form of diphtheria, commencing, as it sometimes does (see Dr. Jenner), independently in the larynx.

That diphtheria is communicable in some way as yet unknown is, I think, sufficiently proven; were the proofs much less convincing, it would, I think, be clearly our duty to advise our patients to take precautions founded on the admission that it is so.

I cannot resist the temptation to say a few more words to you about the secondary accidents (to use a phraseology hitherto confined to another malady) of diphtheria. The fact that these come on at a certain variable time after the primary disease has been recovered from, and then attack remote and various parts of the body in a singularly erratic manner, and do not, at least constantly, spread, so that we can trace them in continuity with the original seat of the primary local disease—strengthens the conviction that we have to do with a general disease, and raises the interesting question, How are these paralytic phenomena produced? Is there a poison circulating in the blood acting specifically upon the nervous centres? or do certain structural changes occur in the brain or cord, or in the nerves themselves supplying the parts which we find paralysed?

I do not think we are in a position to speak with confidence; but negatively more may be ventured than affirmatively. The entire absence of intellectual disturbance, the abruptly limited and scattered spots of paralysis and anaesthesia in distant parts of the body, and the dissimilarity of these symptoms to any known influence exercised by poisonous agents acting through the blood on the brain or spinal cord, exclude the first assumption; whereas the variable seat and intensity of the palsy, its spotted character, its



speedy cure, the discordance of its boundaries with those which we find clinically in cerebral and spinal palsies, induce me to reject the notion of there being any local structural change in the nervous centres, even of a temporary and slight kind, as Trousseau has suspected. Still less can I agree with the suggestion thrown out by Dr. Gull, that an inflammation has spread to the spinal cord from the throat; for on this supposition it is difficult to explain the not uncommon palsy of the muscles of the eyeballs, or the interval of comparative health which, sometimes at least, intervenes between the throat-affection and the beginning of the paralytic symptoms, or the occurrence of severe palsy after trivial throat-affection, or paralysis after diphtheria of the skin; although the fact that the palsy usually begins in the soft palate may seem to give some force to this opinion.

To affirm is more difficult; and it is with the utmost diffidence that I suggest as probable a second outbreak of the specific malady, modified in its character and affinities, having its seat in the nerves themselves in some part of their course, and analogous to the outbreak of secondary syphilis in the skin, etc.

This view may be submitted to the test of the scalpel in fatal cases, and is open to investigation also by a careful tracing out of the boundaries of the spots of paralysis and anaesthesia during life.

Whatever may be the cause of the palsy, it is not connected with the albuminuria often met with in this disease, nor necessarily with the anæmia.

As to the *treatment*, we do not as yet know any agent which can effect that which we seek; viz., to neutralise or destroy the specific morbid poison here assumed to exist; but we have a fair ground for hope that such an agent exists, and may some day be discovered.

At present, our most hopeful measures seem to be those directed towards preventing the spread of the local inflammation from the fauces and pharynx to the glottis and larynx, and thus avoiding one of the main tendencies to death.

It has been recommended for this purpose to use strong caustics, especially the mineral acids or nitrate of silver; but their employment is necessarily limited to a small proportion of cases, because they can never be prudently and effectually applied to that large number of cases, which we only see for the first time when the mucous membrane of the throat is too extensively invaded to permit our applying them in all directions beyond the outermost limits of the redness, by which mode alone can we hope to derive that benefit which has been claimed for them. In many of the cases which we do thus see in an early stage, as I have witnessed, no treatment is needed; and we are here met with a difficulty which too often confronts us in other maladies, that we cannot know a slight case from a severe one while it is yet but imperfectly developed.

On the whole, I am disposed to limit the employment of strong caustics to the earliest stages, and then I prefer the nitrate of silver to the acids. Yet local agents seem to promise more than any internal medicaments with which we are at present acquainted; and we need therefore something not open to the objections which may be raised against the caustics, viz., that they generally harden the exudation, increase the inflammation and swelling at least for a time, and do not with any certainty arrest the spread of the specific inflammation. With this object, gargles have been prescribed; but they cannot be used properly by children, and even adults cannot by gargling bring the fluid used into contact with any considerable part of the pharynx, as in this act the fauces are contracted,

and a current of air is blown bubbling through the liquid, which is thus kept in front of the posterior palatine arches, with the exception of a few drops, which accidentally pass a little further. Nor can we apply our weaker agents to these parts frequently by means of a sponge or brush; it wears beyond endurance a patient very seriously ill; young children will not submit to it; and many persons, young and old, have an amount of pain and stiffness about the angles of the jaws which prevents their opening the mouth widely enough to permit this little operation to be successfully performed.

These considerations induced me to employ an agent which, from its feeble action on the system, might be given in large quantities, and to administer it in small doses very frequently swallowed, so as to attain a local action which should be greatest just at that border region between the pharynx and the glottis, which we most desire to shield from injury. I used for this purpose chlorate of potash, a salt which has long had a reputation for all kinds of stomatitis, and combined with it borax, adding at one time a little dilute hydrochloric acid somewhat empirically. My patients swallowed in twenty-four hours often six drachms of chlorate of potash and two drachms of borax, in very small doses, repeated every half, or even every quarter hour, night and day. In this way, I think I observed that the medicine had, if very resolutely persisted in, a local action on the false membrane tending to soften it, and on the mucous membrane of a soothing character. Hammond's case, detailed above, seems to illustrate this statement. I have treated ten cases, some of them severe, successfully by this method, not including the milder diphtheritic sore-throats, and of the eight deaths which occurred, only one was treated by this method, and in that case the larynx was already implicated before the treatment was commenced, so that the patient, a child, could not try the plan fairly. I do not mean to assert on such a limited basis of facts that it is demonstrated that by this means we can arrest the spread of the inflammation to the larynx; but it is, I think, made sufficiently probable to justify a further employment of the principle involved.

As regards the paralytic sequelæ: it has been generally agreed on by most observers that, under a tonic treatment, the particular tonics seeming to be of but little moment, most cases recover. I can only say, with reference to this point, that I give a decided preference to the tincture of sesquichloride of iron, having, I think, seen it exert some control over the progress of the palsy. I have employed it in nine cases, which all did well; several of them were severe. However, it must be admitted that as yet we know of no means of preventing or cutting short the secondary paralysis.

## BENGAL BRANCH.

### TWO CASES OF CYANOSIS.

By S. GOODEVE CHUCKERBUTTY, M.D.

I HAVE much pleasure in communicating a brief account of two cases of cyanosis which came under my observation.

The first case was that of a Hindoo boy, 5 years old. He was brought to me to be examined. He had been subject to the disease from his birth; he was always blue, but the depth of the colour became highly intensified on any excitement. At first, he had difficulty of swallowing, and was very blue; but latterly, he had suffered comparatively little, and the blue discoloration was perceptibly decreasing. Medicines had had no effect on the affection. On examination, I discovered a strong *bruit* at the base of the

heart corresponding with the first sound. The boy being otherwise in good health, and evidently outgrowing the malady, I advised the parents to desist from treatment, and to give him plenty of rest, fresh air, and good food; and I have reason to think he gradually got over the complaint.

The other case was that of a European infant born only a few hours. It had been of a deep blue colour from its birth; but had cried well and taken castor-oil, honey, and milk and water. It had had the usual warm bath and clothing, and there was no accident at the time of its birth. The respiration was good; swallowing painful, for it rejected the milk put into its mouth; the bowels had moved freely several times; and in every other respect the child was well so far as could be ascertained. But its colour was deep blue, which became highly intensified during crying. It had moaned constantly from its birth, and refused to take the breast; but its stools and urine were good, and the remnant of the milk it had taken also good. There was no audible murmur in the heart. Death took place, in spite of every effort to save it, fifteen hours after birth, April 9th, 1864.

## Reviews and Notices.

OUTLINES OF SURGICAL DIAGNOSIS. By GEORGE H. B. MACLEOD, M.D., F.R.C.S.E. Pp. 529. London: 1864.

THE importance of accurate diagnosis in surgical diseases is dwelt upon by the author in an introduction of sixty-five pages. This must be regarded as the most important and original part of the work before us.

"In order to discern diseases aright" (he observes), "there must be a truthful mind, which takes a just and unexaggerated view of things; sound judgment which seizes upon, weighs, and compares those features in cases which are characteristic and of value, and excludes those only which are unimportant; clear reasoning powers, to draw just and logical inferences and conclusions without bias; and, lastly, patience to unravel and often to wait the development of the phenomena. A ready and accurate memory, too, is most requisite; and that education of eye and ear and hand, which renders them acute, intelligent, and ready ministers to the mind."

Dr. MACLEOD, however, believes that, with all this, the ability to discriminate disease is doubtless, to some extent, a natural endowment; and he might, perhaps, with much truth, have added, that the greatest ability and tact in diagnosis are acquired by those whose constant attention is directed to some particular forms of disease. We are far from advocating the doctrine, that a specialist is likely to form the best diagnosis, even in his own line; but it is nevertheless true, that no one can know all subjects equally well, and that, if he attempt to do so, he will not have a very profound or accurate knowledge of any. These remarks apply with more or less force to all works which attempt to embrace the whole class of surgical or medical diseases. Want of accuracy and precision naturally result from any author attempting to take too extended a view. We, nevertheless, believe that Dr. Macleod has added a valuable book to the literature of our profession; and has directed timely attention to a branch of study which has often been cultivated far less than it deserves.

LUNACY AND LAW; WITH HINTS ON THE TREATMENT OF IDIOTS. By T. E. D. BYRNE, L.R.C.P. and M.R.C.S. London: 1864.

IN this pamphlet, Dr. BYRNE gives an account in full of the now famous case of the unfortunate idiot confined at Flushing. Our readers may remember that to Dr. Byrne is mainly due the credit of having released this poor wretch from the hideous den wherein he was confined. His object is to call upon the legislature to throw a greater protection than it at present does over these unfortunate creatures.

## British Medical Journal.

SATURDAY, SEPTEMBER 17TH, 1864.

### NATURAL HISTORY OF SYPHILIS.\*

UNDER this title, Dr. Diday has published three lectures delivered last year in Paris, accompanied by some very valuable notes in an appendix. We purpose to follow Dr. Diday through some of the principal points of his work, as far as the history and nature of the disease are concerned, adding such observations as the subject may suggest.

Until within the last forty or fifty years, all venereal affections were confounded together, and were all considered equally capable of infecting patients' constitutions; and they were all treated from the commencement with mercury. Gonorrhœa and bubo were placed on the same footing as the infecting chancre.

It appears to us strange in the present day that the difference between gonorrhœa and syphilis should not have been recognised; but between the two kinds of syphilitic ulcers the distinction was less easily made. In 1852, M. Bassereau announced the doctrine that the indurated chancre could only be communicated from a similar affection. In 1855, M. Clerc asserted that this form of disease had the essential characteristics of not appearing until after a long period of incubation, and of not being reinoculable upon the same patient.

Dr. Diday gives the following characters as distinguishing the two forms of syphilis.

|  |   |
|--|---|
| An indurated ulcer.                                | A soft ulcer.   |
| Period of incubation of two or three weeks.        | No period of incubation.  |
| Originating in "adhesive inflammation".            | Originating in "suppurative inflammation".                          |
| Not reinoculable on the patient himself.           | Reinoculable indefinitely on the patient himself.                   |
| Not capable of being arrested by artificial means. | Arrested every time that it is completely destroyed.                |
| Affecting exclusively the human race.              | Capable of being transmitted to several different kinds of animals. |

\* Diday: Sperino.



Constantly accompanied by chronic enlargement of the inguinal glands.

Producing always, after a certain interval, a series of characteristic secondary symptoms.

Susceptible to the action of certain general remedies called specifics.

Affecting the same patient once only in the same way.

Not always accompanied by affection of the inguinal glands, but producing suppurative inflammation in these when affected.

Producing only a local disease.

Not influenced by any specific treatment.

Reproduced on the same patient, in much the same manner, as often as he may be inoculated.

When Dr. Diday sees these manifest differences in the origin, progress, and results of the two diseases, his reason, his common sense, forbid him to believe that they depend upon a single morbid poison. He asks himself, If these different symptoms be not sufficient to establish the fact of the existence of two distinct affections, what diseases can by their symptoms be distinguished from each other?

But still further distinctions are sought to be made. Dr. Diday believes that there is a strong syphilis and a weak syphilis. That the affections resulting from the latter, which comprise the greater number of cases derived from a secondary disease, admit of being cured without difficulty, and do not require mercurial treatment.

Dr. Sperino (*Etudes Cliniques sur le Virus Syphilitique*, Turin, 1863) maintains a different doctrine. He believes that the syphilitic virus enters a patient's constitution, as a rule, by two different means—viz., by the primary ulcer, and by the mucous tubercle; that the disease which results from the two different modes of infection presents very different characters; that the primary ulcer, or chancre, always results from a similar ulcer, and that the secretion of this is not contagious unless applied to a part where there is a solution of continuity; and that this ulcer has no period of incubation.

The mucous tubercle, on the contrary, Dr. Sperino believes, may be communicated without any solution of continuity, by imbibition of the diseased secretion through the cuticle of a sound part. This disease, he believes, has a period of incubation from fifteen to thirty days.

Dr. Sperino also believes that the primary ulcer is followed by constitutional syphilis only when it has been accompanied by a chronic induration of the corresponding inguinal glands. This induration commences from twelve to fourteen days after the appearance of the ulcer.

The mucous tubercle, on the other hand, is always preceded by the indolent induration of the lymphatic glands. The mucous tubercle, which arises as a secondary affection from the virus of a primary chancre (after it has passed through the absorbent glands), can neither reproduce the primary chancre

nor the suppurating bubo; and, on the other hand, the virus of the primary ulcer deposited on the tubercle makes it disappear, and produces an ulcer in its place.

The virus of a mucous tubercle derived from a secondary symptom, and preceded by chronic induration, necessarily and invariably produces constitutional disease.

The virus of a primary ulcer produces secondary symptoms only when it is absorbed and carried into the lymphatic glands, producing there the chronic indolent bubo.

The peculiarity of the primary virus does not depend in any way upon the difference of the poison in different cases, but depends upon circumstances which pathologists had not appreciated at the time Dr. Sperino wrote. According to his theory, the poison taken up by the lymphatics is arrested, for a greater or less length of time, in the ganglions. It may there produce either a chronic induration, or an inflammation followed or not by suppuration.

If the secretion of the primary sore is abundant, and if the pus is thick and well formed, and especially if there are many ulcers, secreting a large quantity of pus, one of two things will take place. Either the virus, secreted in abundance, will be carried directly by the veins, into the current of the circulation (!); and then, not being modified by the action of the absorbents, this virus will be inoffensive as far as the general constitution is concerned, and will be quickly expelled with the different excretions: or else the virus will reach the ganglions, and in sufficient quantity to distend them forcibly. The ganglions will become inflamed, and suppurate; and then, as the destroyed ganglion cannot modify the poison, this will again not affect the patient's general system.

More than this. If a patient who has chronic enlargement of the inguinal glands, or even secondary symptoms, contracts primary sores which produce suppuration of the inguinal glands, not only will the induration subside, but the constitutional syphilis will be cured in a more complete and quicker manner than under other circumstances.

Attaching the utmost importance to the disappearance of the enlargement of the inguinal glands, Dr. Sperino applies mercurial ointment to the generative organs, in order that it may be absorbed and enter the glands by the same channels as the poison—a mode of practice, it may be observed in passing, long ago recommended by Mr. Hunter, Mr. Briggs, and other surgeons of past times. Dr. Sperino says that, if this local treatment commences as soon as the induration has declared itself, and is continued until it has disappeared, no constitutional symptoms will follow.

Now these are some very important conclusions for such an authority as Dr. Sperino to publish; and

it may not be uninteresting to trace how a theory presenting such complication, and so much at variance with that which other modern writers have adopted, should have been matured.

As early as the 23rd of March, 1851, Dr. Sperino presented a memoir to the Medical and Chirurgical Society of Turin. He had observed that those females, who had repeatedly been subject to primary affections, were not so liable as others to secondary syphilis; and he associated this fact in his mind with the experiments of M. Auzias-Turenne. Dr. Sperino, therefore, undertook an extensive series of experiments upon the female patients of the Regio Sifilicomio. The subjects of his experiments were all labouring under either primary or secondary syphilis. The matter inoculated was taken from a primary ulcer presenting all the characters of the "Hunterian chancre".\* On the third or fourth day, a syphilitic pustule appeared on the side of each puncture; and, on this bursting, an ulcer was developed, with all the characters of the primary sore. Now, it appears certain that Sperino had fallen into the error common in that day—the great error of Ricord—of regarding all chancres as producing the same immediate effects when inoculated, and as all being equally inoculable upon the patients who had them. It has now been incontestably shown that the indurated chancres cannot be, as a rule, re-inoculated upon the patients who have them; and that, when inoculated, the results do not appear immediately; and, when they do appear, that they differ materially from the pustules described by Dr. Sperino. According to Dr. Diday, the mean period of incubation, after the inoculation of the secretion from a secondary syphilitic affection, is twenty-eight days; and after the inoculation of the secretion from a primary chancre, eighteen days. It has, therefore, been proved that Dr. Sperino was not performing his experiments with the virus that he thought he was using; and this cause of error runs through the whole of his observations. Unwilling, however, to give up his idea that the syphilitic poison was always one and the same, but finding that sometimes secondary effects were produced, and that sometimes they were not, Dr. Sperino has had recourse to the theory of which an outline has been given above. With regard to the theory itself, although it contains much that is ingenious, it need only here be remarked, that the English pathologist would feel himself very hard pressed indeed for an explanation before he could admit as satisfactory, that suppurating sores are not followed by secondary symptoms, because in them well-formed pus is carried in quantity by the veins in the course of the circulation. The majority of modern observers can have now no

doubt that, while Sperino and his followers believed that they were inoculating the syphilitic poison which infects a patient's constitution, they were, in reality, amusing themselves with a much milder agent, capable of producing only a local disease.

And what must be said of Dr. Diday's idea of a mild and a strong form of syphilis, using the term to designate the infecting form of the disease? Dr. Diday has attempted to prove his position by giving examples in which the disease produced very grave consequences, and the reverse; by describing the causes which lead to the greater or less manifestation of the effects of the poison; and by tracing the different powers of resistance of the constitutions of different infected persons.

The virulence of the poison may, according to Dr. Diday, be diminished by the number of transmissions through different patients; by the manner in which it gains access of the system; by its diffusion in the organism.

Dr. Diday also considers at length the differences of the contaminating causes in different cases of syphilis, the difference of the first period of incubation, the difference in the first manifestation of the disease, the difference in the second period of incubation, and the difference in the treatment required. Now, upon all these points, the learned doctor has the support of numberless well observed facts; and there can be no doubt that the differences which he has described do in reality exist as the disease is presented to us by clinical observation. But it is, nevertheless, very doubtful whether the affections described can be divided into two classes without artificial aid. Such a classification might lead men to the belief that the two classes of disease were essentially distinct, whereas no such clear distinction can be traced in nature. It will probably be hereafter acknowledged that it is much more in keeping with the natural history of syphilis, as written on the bodies of men, to describe the disease as one; not divided in two classes only, but modified in many ways. Such modifications we have fully described in some of the recent works on syphilis. Thus we have now generally recognised the disease as modified by previous infection, as modified by the existence of hereditary influence, and as modified by the length of time that it has existed among a people. We have many other modifications produced by age, sex, and climate; and others, again, by temperament, treatment, and the coexistence of other causes of disease. It is not intended, by anything that is here said, to detract in the least from Dr. Diday's great merit as an original and scientific observer of nature; but it is probable, from the considerations already adduced, that the profession will not be prepared to admit at present that there is anything like a clear distinction of constitutional syphilitic affections into two classes.

\* Reports of the Physiological Society of Edinburgh for 1852. Communication by Dr. Murchison, Physician to the British Embassy at Turin.



## MR. CARTER AND THE MEDICAL PROVIDENT FUND.

MR. CARTER has been, during the past year, a member of the Committee of the Medical Provident Fund; and his last act has been to issue a printed document, to the character and language of which—and not to the mere publication of a letter—we last week expressed strong objections. In this document, Mr. Carter tells his readers, that the majority of his colleagues in the Committee “welcomed the Fund for the sake of the Association, rather than for the sake of the men who will chiefly need it”; and in his letter in to-day’s JOURNAL, he repeats the accusation. We said last week, that Mr. Carter’s words conveyed a gratuitous misstatement. What they do definitively convey is: that certain members of the Committee appointed at Bristol had no object in view, in planning the Provident Fund, but the aggrandisement of the Association; that, in fact, they were not influenced by a sentiment that the Fund should be made useful to the profession. That our readers may judge how far such an accusation is likely to be correct, we will recal to their minds the names of the Committee:—Sir Charles Hastings; Mr. Daniell—to whom is due the merit of having been, many years ago, the promoter of a provident scheme; Dr. H. Day; Mr. G. Pound; Dr. Bryan; Mr. H. Gramshaw—both of the latter gentlemen being the authors of several letters in the JOURNAL on the importance to the profession of medical health insurance; Dr. Stewart; Mr. E. Bartleet; and Dr. Richardson; with Mr. Carter. The Association knows these gentlemen well; and we may safely leave it to the members to form their own conclusions as to whether or not the *majority* of the Committee (to use Mr. Carter’s own words) welcomed the fund merely for the sake of the good it would do to the Association. We do not pretend to know what passed in the meetings of the Committee. The report informs us that the limitation question was discussed seriously; and that a majority of the Committee were in favour of limiting the fund to the members of the Association. But it is an insult to attribute to the majority of the Committee any sinister motive; or to insinuate that their intentions with respect to the fund were less pure than those of Mr. Carter. Mr. Carter says he cannot break the confidence of the Committee; but, inconsistently enough, he has already broken confidence by publicly attributing to his colleagues, as actuating their proceedings in their meetings, certain motives which they have not recognised. He has thus brought against them a most serious and (as we must believe until we have good reason to think otherwise) unfounded imputation. It would have been well if Mr. Carter had stated how many meetings of the Committee he attended; and how he knew that the

majority of the remaining nine members had only the Association in view. The minutes of the proceedings of the Committee were open for inspection at Cambridge, in the Council-room. We have seen them; and from them it appears that Mr. Carter was present at *one* meeting only, at which there were present three other members besides himself. From such an intercourse with the Committee, he has published what we venture to think every candid member of the profession will agree with us in considering, until better informed, little better than a gratuitous misstatement.

Mr. Carter, however, would have himself alone regarded as feeling a true and unselfish regard for the real interests of the Fund; and he therefore calls upon the profession to put pressure upon the directors, and force them to do what he (Mr. Carter) thinks ought to be done; and if they will not do it, to get up a Fund of their own. These directors are to have no opinion of their own; men like Dr. Burrows, Dr. Symonds, Mr. Carden, and Mr. Heckstall Smith, are unable to discuss and duly settle the matter affecting the Fund unless a pressure is put upon them by Mr. Carter. This seems to be Mr. Carter’s view; and he has acted accordingly. He accuses his colleagues in Committee of having exhibited an incapacity for an impartial examination of the subject; and he now attempts, by pressure from without, to make the directors act according to his lights; and under the threat of creating a schism. We sincerely trust that the profession will not allow themselves to be led away by Mr. Carter’s statements, which, of course, being hurtful to the Association, are eagerly endorsed by the *Lancet*. Can any one doubt for a moment that, in the hands of the gentlemen above-named, the Fund is in the hands of those who desire—as eagerly and, we are sure, not less wisely than Mr. Carter—the complete success of this most excellent Fund? The directors will discuss every particular affecting the data on which the Fund is to be based; and need we say, that in the names above given, the profession has a perfect security that nothing will be done except that which is best for the interests of the Society.

As to the statement made by Mr. Carter, that his election to the Directorate was quite unexpected, it is inconsistent with all that had previously occurred. He had been elected at Bristol a member of the Committee; and at Cambridge his protest had been allowed to form part of the Report; and on all occasions every consideration had been shewn him. He could therefore scarcely do otherwise than infer the possibility—not to say the probability—of his being elected a Director; and, as the notice summoning the Committee of Council to elect Directors appeared in the JOURNAL a week before his circular was issued, he might in ordinary decency have waited for a few days, before issuing such a document. He calls the

document a report. If it had been a report of what had taken place, to those gentlemen with whom he had been specially in communication, no one would have objected to its publication; but we have objected, and do object to it, on account of its character, and of the unfair and—as we believe—unfounded accusations which it makes against a body of men who have the good of their profession at heart, at least as earnestly as Mr. Carter.

### CARDIO-THYROIDEAN EXOPHTHALMIA.

M. VON GRAEFE has lately called attention to a symptom hitherto unnoticed in the above-named affection. This symptom presents itself from the first, and is characteristic and pathognomonic. It is the suspension of the sympathetic connection normally existing between the vertical rotation of the visual plain, and the movement of elevation and depression of the superior eyelid. In the normal state, the eyelid is seen to follow this movement, and to be elevated or depressed in proportion to the extent of the rotation of the eye. But in the case of this disease, the eyelid remains motionless, especially in the rotation of the eye downwards. This symptom is not observed in ordinary exophthalmia, as when the eye is protruded by an intraorbital tumour. But it is constantly present in cardio-thyroidean exophthalmia. It is evident that this immobility of the muscle of the eyelid depends upon some interference with its nervous influence. Probably, this function of the muscle depends upon the filaments of the sympathetic supplied to some of its fibres, as pointed out by Müller; the portion of the muscles to which those filaments are supplied being employed in co-ordinating the movements of the eye with those of the eyelid. This symptom is important, because it presents itself at a very early period of the disease. Hence, the initial semiology of cardio-thyroidean exophthalmia affords us two symptoms: oculo-palpebral ataxia and acceleration of the heart's action, independent of any organic disease. The condition of the thyroid gland, of the heart, of these muscular fibres of the eyelid supplied by the sympathetic—all tend to show that the sympathetic nerve is the chain by which they are linked together. This theory is strengthened by a recent discovery of von Bezold, that the heart's movements are accelerated through this ganglionic nervous chain. M. Remak has practically made use of this fact by subjecting the cervical portion of the sympathetic to galvanism in a case of spasmodic action of the heart. M. Remak, also, relates the case of a patient affected with facial paralysis of ganglionic origin; the paralysis being characterised by total muscular anæsthesia, as well as by muscular atrophy. The paralysis was attended by swelling of the superior cervical ganglion of the sympathetic, as well as by swelling and induration of the corresponding submaxillary gland. The patient

was completely cured by the application of the interrupted electrical current.

These facts tend to show that exophthalmia is a nervous affection seated in the cervical portion of the sympathetic. The therapeutical remedy which is recommended as worthy of trial in such case is founded on physiological considerations. It is the application of the electrical current to the cervical sympathetic; the early and true condition of the disease being determined by the symptom pointed out by Graefe, and here detailed.

WE are glad to find that the Horse Guards has issued a circular to the effect, that in future, when the necessity for marking a soldier occurs, the operation shall be performed by the drum- or trumpet-major at the orderly-room, in the presence of the adjutant, and under the immediate supervision of a regimental or a staff medical officer. Some small instalment has thus been made of what is due to the feelings of the army medical officer. Let us hope that it indicates the entrance of the thin edge of the wedge of general opinion into the adjutant-general's office.

A FRENCH critic says: "The Anglo-Saxon women appear to be pusillanimous, weak, or hyperæsthetic; for it is certain they do not bear the pains of parturition with as much courage as the women of other countries. We have the proof of this in the fact, that in Great Britain chloroform anæsthesia is much more frequent than elsewhere. There it first was used; and there it continues in use, despite the dangers and mortal accidents which attend it."

The discovery of the vaso-motor nerves is of recent date. In 1852, M. Bernard showed that, after section of the cervical portion of the sympathetic, the temperature on the side injured was increased. Dr. Brown-Séquard subsequently proved that the increase of heat was the direct consequence of dilatation of the blood-vessels and of the increased flow of blood into them. Thus it was shown, that certain nerves preside over the contraction of the arteries; and on this fact, Dr. Brown-Séquard founded his theory of reflex paralysis. The Academy of Sciences has also lately rewarded M. Cohen for his researches into vaso-motor neuroses. M. Pontevéz, in a thesis, has lately given a complete *résumé* of the whole subject. The theory of the vaso-motor nerves is, as he says, a doctrine pregnant with important results, destined to revolutionise the practice of medicine. Thus, for example, the febrile state, heretofore supposed to be a state of excitation, is by this theory shown to be a state of weakness. The hot and red skin is produced by relaxation of the blood-vessels, just as it is produced after division of the sympathetic. Paralysis of the vaso-motor nerves produces congestion; their excitation removes it; and their destruction deter-



mines suppuration. In these facts, we have a physiological and modern key to the character of inflammation.

M. Bernard has made an interesting communication to the French Academy, entitled "A Physiological Study of Opium and its principal Alkaloids." He has experimented with morphine, narceine, codeine, narcotine, papaverine, and thebaine. He has found that the three first of these only are soporific, each of them producing sleep in its own particular way; and that the three last have toxic effects. Opium, therefore, is a mixture of many substances, whose properties, as regards their action on the body, are different. Opium, indeed, probably contains other substances besides those here enumerated. M. Bernard, in his experiments, administered the alkaloids in the form of hydrochlorates, and by injection into the cellular tissue. By this means, the absorption of the active principle is more regular than when introduced into the stomach, and the results obtained are more sure and trustworthy. His experiments were made on dogs, cats, rats, frogs, sparrows, etc. The effects produced were always alike; due allowance being made for the different degrees of sensibility of the animals operated on. Morphine, he found, is a more profound soporific than codeine, and narceine was intermediate in power. MM. Debout and Béhier have, it appears, lately studied the action of narceine on man, and will shortly publish the results of their researches. All the bodies extracted from opium are toxic. Thebaine is most especially so; next stands codeine. Hence it follows, that physicians err in prescribing larger doses of codeine than of morphine. Two or three *centigrammes* of codeine injected into the veins of a dog kill it rapidly. All the alkaloids of opium, with the exception of thebaine, produce convulsions.

In a late number of the *Archives Générales de Médecine*, MM. Bergeron and Lemaitre treat of the question of the elimination of medicaments with the perspiration. M. Lemaitre studied the matter in the wards of M. Cazenave, where he had large opportunities of observing cases in which vapour-baths and arsenic and mercury were employed. The perspiration of patients subjected to arsenical and mercurial treatment was carefully collected, and as pure as possible, for examination. Nine patients were experimented upon. Of these, seven suffering from psoriasis were treated, two of them with arsenite of potash, two with arsenite of soda, two with arsenite of iron, and the other with bichloride of mercury; the eighth was treated with iodide of mercury; and the ninth with iodide of potassium. The results obtained were as follows. The arsenites of potash and soda are eliminated as such; the arsenite of iron is decomposed, the iron being eliminated from the kidney; and the arsenic in an alkaline form from the skin. The protoiodide of mercury is eliminated;

traces of mercury are found in the perspiration; and iodine in the saliva and urine. Bichloride of mercury is found in the sweat, and traces of it also in the urine. In a case of albuminuria, these observers found no albumen in the sweat; but, in a case of diabetes, they found in it a large quantity of sugar.

It is much to be desired, says M. Batailhié, that the theory of acute putrid infection were adopted in the interests of our hospitals, of our patients, and of the army. A great example has just been set in this way by one of our most celebrated surgeons. *L'Hôpital des Cliniques* has the worst repute for healthiness of all the Parisian hospitals. There especially are observed the severest epidemics of purulent infection; so that it might almost be said that this terrible affection is endemic there. Professor Nélaton, and his assistant there, M. Houel, have completely given up the surgical doctrines of the schools. They have excluded from their practice ointments, emollients, etc. They now employ *antiputrescents*, and almost solely that which is the type of them, strong spirits; and, besides this, they give their patients after operations eatables and drinkables. This has been their practice for fifteen months, and during this period there has not been in this hospital a single case of purulent infection; and, in fact, this hospital is now the healthiest in France; and all this without moving a stone, taking out a nail, or spending a sou.

MM. Inzani and Lusana give two pathological cases which confirm the usually accepted view, that the lingual nerve presides over taste in the anterior part of the tongue, and the glosso-pharyngeal over taste in the posterior part of the tongue and in the fauces. They also affirm that the branch of the fifth nerve has no influence over the sense of taste, but that its specific influence over taste is derived from the chorda tympani.

The following are the conclusions of the report drawn up by a Committee of the Parisian Hospital Society, on the subject of isolation of patients suffering from contagious diseases. Patients affected with small-pox should be isolated. The excellent results obtained from the methods of isolation used in the convalescent asylums of Vincennes and Vesinet, in the army and navy hospitals, and in the hospitals of Germany, Denmark, Russia, Sweden, etc., show that the dangers supposed to result from isolation may be readily obviated. Special hospitals are not required, and may be attended with inconvenience. Special small-pox wards should be attached to all hospitals.

M. Brierre de Boismont has lately pointed out what he believes to be the differential characters between the suicidal acts of reasonable beings and of lunatics. He considers it to be an established fact, that lunatics, when about to kill themselves, never leave behind them any kind of writing to indicate the motive of their act; and, consequently, he draws

the inference, that it is extremely probable, whenever a suicide leaves behind him any writing indicating the reason of his destroying himself, that the deed was not the act of a lunatic.

A statue is to be raised in France to the memory of Laennec.

## Progress of Medical Science.

### MEDICINE.

**MENINGITIS OF THE BASE OF THE ENCEPHALON: RAPID DEATH.** The following case is related by Dr. W. Derblich, regimental surgeon in the Austrian army.

A. G., a soldier, twenty-four years of age, a large made robust man, was brought into hospital on July 5th, 1864. He was perfectly conscious, and complained of universal tenderness, especially in the head, right knee, and back. He had always enjoyed good health, until nine days before admission, when he returned home heated after exercise, hastily drank a pint of water, and afterwards felt oppression in the chest, and in the course of the day had alternations of heat and chills. Slight febrile rigors, loss of appetite, and sleeplessness, were followed by return of appetite, loss of pain, and disappearance of fever. This was within the first four days; and on the fifth day he was sent on foot as sentry to a station some miles distant. He arrived wet through by rain, was unable to obtain any rest during twenty-four hours, and on the next day was seized with violent pains in the limbs, loins, and head. These increased so greatly, that, when admitted into hospital, he could not turn his head nor draw up his feet towards the abdomen. The temperature of the whole body was remarkably increased; the face was red; the conjunctivæ were somewhat injected; the pupils were not dilated; the countenance was clear; there was no photophobia; the tongue was covered with a white fur, and could be moved in any direction, but trembled slightly. The head was strongly turned to the left; and any attempt to move it to the right caused much pain. Touching the nape of the neck caused pain, although nothing abnormal could be detected either here or in the muscles of the neck generally. The carotids on both sides pulsated vigorously. The chest was strongly arched; the respirations quickened—42 in a minute. The percussion-sound was everywhere clear and full. By immediate auscultation, an exaggerated, slightly rough breath-sound was detected. The heart was in its normal position; its impulse was strong and full; the first sound was accompanied by a scarcely audible blowing murmur. The abdomen was somewhat enlarged, but the percussion-sound was duller than normal. The stomach was moderately full. Nothing abnormal could be detected in the liver, spleen, or intestines; the bladder was moderately full of urine. The patient was in a state of general depression and *malaise*; he was rather feverish (pulse 78), and complained of entire loss of appetite and moderate thirst. His bowels had been open in the morning; the evacuation was loose, and was unattended with tenesmus. Eight leeches were applied behind the ears, and ice to the forehead; and one-sixth of a grain of morphia was prescribed. Lemonade was ordered for drink.

The next day, July 6th, the patient was found in the morning to be in nearly the same condition. He

had slept but little, and had been very restless. His consciousness was still undisturbed; but he was more excitable. His manner of expressing himself was quicker, and his gestures were vehement. He would rise up, but could not raise his head. Motion of the head to the right was impossible, on account of pain. There was slight divergent strabismus in the right eye. The tongue was moist, and moderately covered with white fur; it could be protruded in all directions. The breathing was somewhat accelerated, but otherwise normal. The heart's action was somewhat stronger than on the previous day; the blowing murmur was heard during the diastole. More than two pints of reddish urine, of high temperature, and rich in urates, were drawn off by the catheter. The right knee was very painful; but there was neither redness nor swelling of the part. He had no appetite; was thirsty; and his bowels were constipated.

The continued pain in the head, the rigidity of the left sterno-mastoid muscle, the inability to hold up the head, the extreme tenderness of the nape of the neck, the strabismus, the paralysis of the bladder, and the hyperæsthesia of the right lower limb, pointed to pressure on the brain by a limited exudation. In order to moderate the hyperæmia and promote absorption, leeches were ordered to be applied, and the ice to the forehead was repeated; and the patient was directed to take every three hours a table-spoonful of a mixture containing half a drachm of iodide of potassium, and half a grain of morphia, in four ounces of water. Cupping-glasses were also applied to the back, and sinapisms to the calves of the legs. Towards noon, convulsions appeared; the patient had slight trismus, and drank with difficulty. The face was very red; the right pupil was dilated and distorted. The respiration was difficult; the heart's stroke quicker and weaker; the pulse was small and very rapid; consciousness was much obscured. In the evening, perfect sopor set in; the breathing became stertorous. Blood-letting, cold affusion, and clysters were employed; and the urine was drawn off by the catheter. The patient was afterwards found in a state of stertor, and unconscious; but, when attempts were made to turn the head to the right, clonic contractions of the muscles of the face took place. The pupils acted but slightly under the influence of light; both eyes were strongly injected; the lips were nearly dry; the respiration was frequent and irregular; the pulse less frequent. The lower limbs were cold to the touch, and were entirely painless on deep pressure. The bladder was much distended. The urine was drawn off by the catheter; and a yellow fluid stool was passed involuntarily. Towards midnight, the stertor increased; the patient had more violent contractions of the muscles of the nape of the neck and general twitchings; the redness of the face disappeared; the forehead and face became covered with a clammy sweat; and the patient died at 2 A.M. on July 7th.

A *post mortem* examination was made thirty-six hours after death. There were some brownish-red *post mortem* ecchymoses on the surface of the body. The expression of the countenance was quiet; the eyelids were sunken. Both pupils were dilated, the right more than the left. The lips were closed, and covered with dry mucus. The abdomen was somewhat distended, and presented several bluish-green spots, where decomposition was commencing. On sawing through the skull, the bones were found to be very thick; the diploe especially was much developed, and very vascular. In the neighbourhood of the sutures, however, the bones were thin and remarkably transparent. The dura mater was firm and vascular; as were also the Pachionian bodies, which were enlarged. The arachnoid could be separated at parts



from the dura mater; on the convexity of the brain especially, it appeared macerated. The vessels of the pia mater were strongly injected; and, in some of the convolutions, it was infiltrated with a muddy serum. The lateral ventricles were dilated, especially the right, and contained about an ounce of whitish tolerably clean serum. The brain-substance did not present any considerable amount of hyperæmia. The pons Varolii and the medulla oblongata, with the nerves issuing from them, were covered with a greenish purulent exudation. In the three fossæ of the base of the skull there was a large quantity of reddish serum mixed with greenish pus. The cerebellum shewed many vascular points on section; the medullary substance was firm. No pathological appearances could be found in the muscles of the nape and left side of the neck. The pleura were adherent posteriorly; the lower lobes of the lungs were slightly cedematous; the bronchial tubes were partly filled with reddish mucus. The pericardium contained a little clear fluid. There was a considerable deposit of fat on the left side of the heart. The right side of the heart was much dilated, and was distended with dark red clotted blood. Nothing remarkable was found in the abdominal organs; there was no trace of tubercle in any part. (*Spitals Zeitung*, July 30th, 1864.)

**BROMIDE OF POTASSIUM AS A SEDATIVE.** Dr. A. Gubler, physician to the Beaujon Hospital, has been investigating, by experiment and clinical observation, the action of bromide of potassium. He has given it in laryngeal and bronchial affections, in cesophageal spasm, in hysteric and spasmodic cough, in chorea and other nervous disorders, and in heart-disease; and sums up his memoir with the following conclusions.

Bromine, in combination as a salt, is not only an anaphrodisiac, or an anæsthetic to the throat; it is a powerful general sedative. Bromide of potassium has generally been preferred; but the preference should probably be given to bromide of sodium, on account of the greater tolerance, on the part of the animal system, of soda-salts, which enter in large proportion into the composition of the tissues of the body. Bromide of potassium, in average daily quantities of about thirty-five grains, in two or three doses, in some mucilage or sugared water, produces a marked sedative effect on the sensory and motor nervous system and on the circulation. As an anæsthetic, it acts more on the internal than on the external integuments, and especially on the isthmus of the fauces, the pharynx, and the genito-urinary passages. The action, however, is not confined to these parts, but extends into the neighbouring regions; especially the cesophagus, larynx, and air-tubes. By this action, painful dysphagia, cesophageal contractions, and spasmodic cough, are calmed. Bromide of potassium acts equally on the nervous centres, as a contraindulant. It relieves congestive headache, prevents or moderates convulsions, diminishes the excito-motor action of the cord, and relaxes tetanic contractions, while at the same time it restrains reflex action. Under the influence of the alkaline bromide, the action of the heart is moderated and rendered slow, turgescence of the capillaries is diminished, and fever is abated. Diuresis, if it have not already existed, appears on the cessation of febrile excitement. Perspiration, on the other hand, is arrested; and the formation of pus and mucus is diminished. The symptoms of *bromism* are almost exactly the opposite of those of *iodism*; hence bromine may be regarded and used as an antidote to iodine. (*Bull. Génér. de Thé.*, July 15 and 30, 1864.)

## Association Intelligence.

### SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the Bull, at Rochester, on Friday, September 30th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

Tickets, 6s., exclusive of wine.

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, September 11th, 1864.

### WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., *Hon. Sec.*

Taunton, September 1864.

## Correspondence.

### POOR-LAW MEDICAL RELIEF.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your giving insertion to the following correspondence, which will inform the Poor-law medical officers that there is a prospect of some relief being yet afforded them. Whether that relief will be of a substantial character, or not, time will disclose. A liberal measure on the part of the Poor-law Board may tend to allay much of the present dissatisfaction which prevails amongst their medical officers. The reverse will most certainly drive us to lay our grievances before the House of Commons next session; and woe betide those members at the general election who turn a deaf ear to our complaints! I have votes in two counties and a borough, and it is my intention to give my support to those six members only who will promise their aid to an equitable adjustment of the system of Poor-law medical relief. If all the medical men would do the same, the grievances of the Poor-law medical officers would quickly vanish. I am, etc.,

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, September 3rd, 1864.

I. Mr. Griffin to the Poor-law Board.

12, Royal Terrace, Weymouth, August 22nd, 1864.

MY LORDS AND GENTLEMEN,—On the 11th of last March, the Select Committee on Poor Relief recommended "that in future cod-liver oil, quinine, and other expensive medicines, shall be provided at the expense of the guardians, subject to the orders and regulations of the Poor-law Board." As some months have elapsed since the recommendation was made, I take the liberty to ask the favour of your informing me if it is your intention to issue any order on the subject, or whether you propose to bring the recommendation of the Committee before Parliament next session. I make this inquiry on public grounds, as many Poor-law medical officers have written to me respecting the recommendation.

I have the honour to be, my Lords and Gentlemen,

Your obedient servant,

The Poor-law Board.

RICHARD GRIFFIN.

II. *The Secretary of the Poor-law Board to Mr. Griffin.*

Poor-law Board, Whitehall, September 2nd, 1864.

SIR.—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 22nd ultimo, and to inform you that the subject to which you refer has been under their consideration, but that they have not yet come to a decision as to the measures which it may be desirable to recommend the guardians of the different unions to take with reference to the resolution of the Select Committee on Poor Relief as regards the supply of expensive medicines. The question, however, will receive the attention of the Board forthwith.

I am, sir, your obedient servant,  
Richard Griffin, Esq. H. FLEMING, Secretary.

MR. CARTER AND THE MEDICAL PROVIDENT FUND.

LETTER FROM R. B. CARTER, ESQ.

SIR,—The leading article, in which you have done me the honour to refer to me in terms of disapprobation, is calculated, I think, to mislead your readers on matters of fact. As far as these matters of fact are concerned, I beg leave, very briefly, to be permitted to address the members of the Association through your columns.

Your article implies, I think, that the publication of my letter was an uncalled for act. On the contrary, I have been occupied for a considerable time in collecting information about the prospects of a provident fund on behalf of certain gentlemen, and I could no longer delay making a report to them. In a sense, I was their delegate, and became so prior to the meeting of the Association at Bristol. My letter was one of a series addressed to the same persons; and the last, like the earlier ones, was placed at the disposal of the weekly medical journals.

Your article implies, further, that the case against me is worse than it otherwise would have been, inasmuch as I have been elected a Director of the Fund. My letter was distributed on the 3rd instant, and I first heard of my election to the Directorate on the 6th. It was a perfectly unexpected distinction. No one had ever asked me if I would undertake the office; and no one had ever suggested to me that I might possibly be selected for it.

I have used certain words, after deliberate reflection, to describe the sentiments by which some of my colleagues in the Committee were actuated. You say that those words convey "a gratuitous misstatement". I have no wish to enter into "he said" and "they said"; and, indeed, I could not do so without a breach of confidence. But I adhere to my original statement. I am possibly more likely to be right than you are in describing opinions that were expressed on an occasion when I was present and you were not, and about a subject on which I am warmly interested. At any rate, your readers must decide for themselves upon the respective values of our opposing testimony.

I have confined myself strictly to matters of fact. Your opinions, and the language in which those opinions are conveyed, are matters which it does not seem necessary that I should discuss.

I am, etc., ROBERT B. CARTER.

Stratford, September 11, 1864.

[Mr. Carter writes to put us right as to facts. He repeats his opinion, that the members of the Committee (excepting, of course, himself)—viz., Sir C. Hastings, Mr. Daniell, Dr. H. Day, Dr. Stewart, Mr.

Pound, Dr. Bryan, Mr. Bartleet, Mr. H. Gramshaw, and Dr. Richardson—in getting up the Fund, have shown that they cared little or nothing about the men who needed its help, but were selfishly engaged in working the Fund for the sake of improving the Association. We venture to think that very few men in the profession will put trust in such an opinion, even though Mr. Carter speaks as a member of the Committee. Mr. Carter forgets that some of these honourable members of the Committee were striving to establish such a Fund long before he even entered the profession. EDITOR.]

"OUR JOURNAL" AND THE LANCET.

SIR,—The *Lancet* has cunningly taken its measures to catch the members of the Association in the trap of discord; and it is painful to see men, deservedly respected, so ready to nibble at the bait. It is a pity that they cannot see that that journal is only anxious to obtain their subscriptions, and, if possible, to draw them away from our JOURNAL, and, by consequence, our Association. I look upon it as long ago decided, that our body must have an organ of communication. The aims of the Association are so important, that they cannot be carried on to advantage except through the medium of a journal of high character—of aims and objects commensurate with those of the Association itself. There can be no excuse for members of our body choosing the *Lancet* for a medium of communication regarding the affairs of our Association. Why should they go to a declared enemy of the JOURNAL in order to ventilate matters in which our Association especially takes an interest? As regards matters of scientific and general professional interest, I apprehend that the editor would be only too happy to receive any really valuable communication. I can speak, from the experience of some years, as to the editor's readiness to give effect to all arguments that may be adduced on both sides of all debateable questions. I call those "debateable", in which the first principles of honour and morality are not concerned. I call those non-debateable, in which there cannot be a second opinion, such as the propriety of medical men consulting with homœopaths, of advertising their wares for sale, etc.

I consider that the *Lancet*, like the *Telegraph*, etc., is to be looked upon as a private speculation, whose business is to disseminate news; and that we need not look in it for any higher principle of conduct than the wish to reflect, as cleverly and cunningly as possible, the most popular opinions of the day, and therefore to sell as many copies as possible. It is, however, impossible that the BRITISH MEDICAL JOURNAL can ever lay itself open to the imputation of being unprincipled, or of simply reflecting the opinions of the baser multitude. It must, as a condition of its existence, reflect the opinions of the *élite* of the profession, who constitute that ever-growing Association. The editor of our JOURNAL cannot use his influence to pander to the passions of an unreflecting mob. I look upon all these false imputations as so many insults to the understandings and feelings of the associates, and quite agree with the view you take of those men who make themselves the tools of the *Lancet's* impotent malice, while they are fouling their own nest.

It is only fair to add, that I have never heard of any expression of opinion, at the Branch meetings throughout the country, other than highly in commendation and self-gratulation upon the present mode of conducting the JOURNAL, and its increasing success.

I am, etc., W. M.

8 September 1864.



## Medical News.

**APOTHECARIES' HALL.** On September 8th, the following Licentiates were admitted:—  
Hayward, John William, Sensalter, Canterbury  
Langworthy, George Vincent, Moulbury, Devon

### APPOINTMENTS.

\*MARTLAND, William, Esq., appointed one of the Surgeons to the Blackburn Infirmary.  
\*SPENCE, James, Esq., elected Professor of Surgery in the University of Edinburgh, in the room of the late James Miller, Esq.  
\*THORNE, G. L., M.D., to be Admiralty Surgeon and Agent at Swanage, vice T. R. Mitchell, M.D., resigned.

**UNIVERSITY OF DURHAM.** The following appointments have been made in the Newcastle-upon-Tyne College of Medicine.

ARMSTRONG, Luke, L.R.C.P.Ed., Lecturer on Anatomy and Dissection.  
ARLISON, William C., M.D., Lecturer on Botany and Vegetable Physiology.  
EMMERSON, Dennis, M.D., Lecturer on the Principles and Practice of Physic.  
MURRAY, William, M.D., Lecturer on Physiology.  
NESHAM, Thomas C., M.D., Lecturer on Anatomy and Dissections.  
\*PHILIPSON, George H., M.B., Lecturer on Pathological Anatomy.  
WATSON, John, Esq., Lecturer on Anatomy and Dissections.

### ARMY.

ADAMS, W., Esq., to be Acting Assistant-Surgeon.  
DAVIDSON, Staff-Assistant-Surgeon W. A., to be Staff-Surgeon, vice Staff-Surgeon-Major H. J. Schooles.  
QUINLAN, Assistant-Surgeon P., 90th Foot, to be Staff-Assistant-Surgeon, vice J. F. Deakin, M.D.  
MACQUEEN, Staff-Surgeon D., M.D., to be Surgeon 44th Foot, vice J. Mee.  
MEE, Surgeon J., 44th Foot, to be Surgeon Royal Artillery.  
MILLER, Assistant-Surgeon O. B., 11th Hussars, to be Staff-Surgeon, vice D. Macqueen, M.D.  
MUSCHAMP, Staff-Assistant-Surgeon W. H., to be Assistant-Surgeon 11th Hussars, vice O. B. Miller.

### DEATHS.

ATRINS. On August 1st, at Bombay, aged 7 days, William Garway, infant son of H. Atkins, Esq., Assistant-Surgeon 4th N. I. Bombay Rifles.  
BATES, William, Esq., Surgeon, at Uppingham, on August 31.  
DUKE, William, M.D., at St. Leonards-on-Sea, aged 68, on Sept. 6.  
FREEMAN, R. G., M.D., at Greenwich, aged 24, on September 13.  
JARDINE, Arthur D., Esq., Surgeon, younger son of \*J. B. Jardine, M.D., at Chatham, aged 24, on September 5th.  
\*POWELL, Robert George, Esq., at Buntingford, Herts, on June 4.  
ROOME. On August 31st, at Parkhurst, Isle of Wight, aged 4 years, Evander, eldest son of Henry Roome, M.D.  
\*STREET, William, Esq., of Reigate, at Llandudno, aged 66, on September 3rd.

**APOTHECARIES' HALL: BOTANICAL PRIZES.** At the recent examination for the prizes in botany, given annually by the society, the successful candidates were—1. Mr. Robert S. Smith, of King's College, gold medal; 2. Mr. George R. Raine, of Guy's Hospital, silver medal and books.

**UNIVERSITY OF EDINBURGH.** Mr. Spence has been elected by the curators of the Edinburgh University Professor of Surgery of the university in the place of the late Professor Miller. Mr. Spence's chief opponent was Mr. Lister, and the contest was a very close one, Mr. Spence gaining the election by a majority of one.

**BANTINGISM.** Mr. Justice Williams is at last pronounced out of danger. For weeks he has been hovering between life and death. It is to be hoped, that those of our readers who are tempted to try the effect of the Banting system to reduce that obesity which nature has given them will think a little of Mr. Justice Williams before adopting it, for it is certain that the serious illness of the learned judge was occasioned by the use of Bantingism.

**POISONED BY SPIRITS OF NAPHTHA.** The deceased was an assistant to a wholesale druggist, and had been addicted to drink for the last eight years. Dr. Llewellyn, who had made a *post mortem* examination of him, said at the inquest that the deceased had evidently been in the habit of satisfying his craving for drink by diluting the spirits of naphtha and spirits of wine and drinking them. He had expired from the effects of taking an overdose of spirits of naphtha.

**DEATH BY HANGING.** An inquest has been held on an apprentice to a printer, who, by allowing his mind to dwell constantly on the case of Müller, came to speculate on the subject of hanging; and while making some experiments lost his life through a misadventure. It appeared that ever since the murder of Mr. Briggs, his thoughts had run in that direction; and often, when speaking of the probable fate of Müller, he had said that he himself should like to be hanged. The rope about his neck was only tied by a single knot. The impression was, that the lad was playing at hanging, and slipped, and became entangled in the rope. He was of a cheerful disposition, and no one ever supposed him to be serious when he talked about his desire to be hanged.

**ARMY ASSISTANT-SURGEONS IN INDIA.** The following has been issued from the Horse Guards. "His Royal Highness the Field Marshal Commanding-in-Chief, with the concurrence of the Secretary of State for War, approves the transfer to the new brigades of Foot Artillery, or to the Staff, of the third assistant-surgeons of all infantry regiments in India as have still three. These officers will be exempted from the payment of the entrance, band, and mess contributions to the corps to which they may be transferred, they having made these payments in their present regiments, and they will only be called upon hereafter to pay the annual subscription while serving. Those assistant-surgeons who may be transferred to the Staff, and have not been eighteen months with their present regiment, will have their entrance, band, and mess contributions returned to them. His Royal Highness also approves that, for the future, all medical officers who may have paid mess and band contributions to one regiment shall not be required to pay the same again to any other regiment, should they be transferred for the convenience and benefit of the service, and not at their own request."

**DR. LANKESTER ON POST MORTEM EXAMINATIONS.** Some days ago Dr. Lankester held an inquest on the body of Elizabeth A. Bushnell. It appeared from the evidence of the husband, a fruit porter in Covent Garden Market, that his wife had been addicted to drink, and that on the day before her death she fell down and injured her head. Mr. Morritz, a surgeon, was sent for, but the woman died before he arrived. In answer to the coroner the medical gentleman said he did not analyse the stomach, as he felt certain about the cause of death. The coroner said he wished it to be distinctly understood by the profession that, when he ordered a *post mortem* examination to be made, it was to be a thorough and not a partial examination; all the organs were to be tested, as poison had frequently been found when there was no suspicion of anything of the kind having existed. As a proof of the necessity for such a thorough examination as he insisted upon, he mentioned a case which came before him some time ago—that of a woman who was supposed to have died from an epileptic fit; but on the stomach being carefully analysed, it was discovered that she had taken a large quantity of oxalic acid. In the present case the jury found that the deceased died from apoplexy, accelerated by a blow and by her previous habits.

## OPERATION DAYS AT THE HOSPITALS.

|              |  |
|--------------|--|
| MONDAY.....  | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| TUESDAY....  | Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| WEDNESDAY... | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.   |
| THURSDAY.... | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| FRIDAY.....  | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY.... | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

## DISEASE IN MANCHESTER AND PRESTON.

MONTHLY RETURN of new cases of disease coming under treatment in the four weeks ending July 30th, 1864. (A) At 28 Pauper Charitable and Public Institutions in Manchester and Salford. Communicated by the Manchester and Salford Sanitary Association. (B) In 6 Poor-law Districts and 1 Dispensary at Preston. Communicated by R. C. Brown, Esq., Preston.

|  | (A)  | (B) |
|--|------|-----|
| Small-Pox .....                        | 39   | —   |
| Chicken-Pox .....                      | 8    | 10  |
| Measles .....                          | 76   | 10  |
| Scarlatina .....                       | 48   | 15  |
| Diphtheria .....                       | 1    | 2   |
| Hoopang-Cough .....                    | 1    | 4   |
| Croup .....                            | 9    | 2   |
| Dysentery .....                        | 372  | 103 |
| Diarrhoea .....                        | 29   | 18  |
| Dysentery .....                        | 29   | 18  |
| Cholera .....                          | 19   | 1   |
| Erysipelas .....                       | —    | —   |
| Puerperal Fever .....                  | —    | —   |
| Insanity .....                         | 43   | 6   |
| Bronchitis and Catarrh .....           | 129  | 85  |
| Pleurisy and Pneumonia .....           | 34   | 12  |
| Carbuncle .....                        | —    | —   |
| Accidents and all other diseases ..... | 382  | 140 |
| Totals .....                           | 5098 | 711 |

## TO CORRESPONDENTS.

\*. All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

S. O.—Dr. Bree left the Association, he says, because the Editor of this JOURNAL refused to allow him to express his opinion on a matter of great public interest; and because, as he supposes, his opinion differed from the Editor's. Dr. Bree's note (it was nothing more) was not inserted in the JOURNAL, simply on account of the unbecoming violence of its language. The past records of the Association shew, that the present Editor of the JOURNAL is not the first who has felt obliged to object to the language used by Dr. Bree in his correspondence, and who has thereby fallen under his (Dr. Bree's) displeasure. Dr. Bree and rash statements seem to go together. No better proof of the fact can be given than his last appearance in print.

PRESERVATION OF VEGETABLE INFUSION.—SIR: It perhaps might be useful to many members of the Association to know, that a small quantity of chloroform added to any vegetable infusion or decoction will preserve it for many weeks. By well shaking one minim of chloroform with each ounce of concentrated infusion of gentian, I have been enabled to preserve it perfectly unchanged for six or eight weeks, during the hot hot weather, at a cost of only one drop of each medicinal part of decoction.

I am, etc.,

JAMES GAGE PARSONS.

Preston, September 16th, 1864.

S. C.—Our correspondent need be under no apprehension. The utmost which the malice and envy of the *Lancet* have accomplished, is to have induced three or four gentlemen to write as it desires they should write in its pages about the Association and its JOURNAL. Any one who will act in this sense will doubtless earn the temporary gratitude of the *Lancet*. Even anonymous writers are encouraged. Last week, the *Lancet* tells a correspondent, who writes under the Israelitish pseudonym "Josephus" about the Association and its Weekly Print, that his letter shall be inserted, if he will only send his name in confidence! One of the three correspondents above alluded to, has already had his reward in a notice, half a column long, and in the leading part of the *Lancet*, of a paper lately read by him at one of our Branch meetings! Papers of this kind, when they appear in our columns, become, as the insolence of the *Lancet* puts it, rubbish. We are sure that there are not half a score of men in the profession who do not see, as plainly as we do, that the whole affair on the part of the *Lancet* is simply and purely a commercial move. It sees our Association and its JOURNAL strong and thriving, and it thereupon follows the instincts of commerciality. Never, since our Association was founded, have the influence and reputation of the Association and its JOURNAL been greater than they are at the present moment; and never, consequently, has it been assailed by more unseemly and furious, though impotent, malice and envy.

THE EDINBURGH MEDICAL JOURNAL for September contains the following papers:—On Treatment of Albuminuria, by Dr. Dickinson; On Arsenic Eaters of Styria, by Dr. C. MacLagan; Customs of Old Calabar People, etc., by Mr. A. Hewan; Cosmic Sensibility, by Dr. Inglis; Case of Alopecia treated by Carbolic Acid, by Dr. Watson; and Fourteen Cases of Ovariotomy, by Dr. Keith.

PART II OF VOL. IV OF THE LONDON OPHTHALMIC HOSPITAL REPORTS has appeared. It contains a paper by Mr. Bowman, On Needle Operations in Cases of Detached Retina; A Case of Congenital Cataract treated by Iridesis, etc., by Mr. Critchett; A Tabular Review of 106 Cases of Squint treated by Operation, by Mr. Hulke. Mr. Lawson contributes Cases of Traumatic Cataract produced without Rupture of the External Coats of the Eye. Mr. Hutchinson continues his Cases illustrating the Connection of the Fifth Nerve with the Nutrition of the Eye. Mr. T. P. Teale, jun., describes a Suction-Curette for Extraction of Soft Cataract. Translation of two papers by Von Graefe are added; viz., Observations on Compression Bandages, and on Perforation of Detached Retina, etc.

SUPERANNUATION ALLOWANCES TO UNION OFFICERS.—SIR: You will oblige me, and probably some others, if you will kindly state in your next issue, whether the recent Bill to provide Superannuation Allowances to Officers of Unions and Parishes, refers to officers whose services have been solely confined to union or parish duties; or whether it includes also such officers as have attended to private practice as well. Unless the latter class is included, I am inclined to think scarcely one union medical officer in three hundred is in a position to derive any benefit from it, or ever will be.

I am, etc.,

AN UNION MEDICAL OFFICER.

Easingwold, September 12th, 1864.

[There can, we believe, be no doubt that the Bill includes those officers who have attended private practice as well as parish duties. EDITOR.]

INDIAN ARMY MEDICAL WARRANT.—A correspondent in India writes: "The Warrant, as it now stands, is most unjust and unfair towards the assistant-surgeons of the old Indian Medical Service. It is true, the Horse Guards and Indian Services now stand in much the same position as regards pay; but when the Indian Service has paid the heavy subscriptions to funds, there is a great falling off in their net pay. I am told, an assistant-surgeon of ten years' standing, if a married man, has to suffer deductions to the amount of 20 per cent. from his pay proper. I will try and send you to-morrow by the Southampton portion of the mail some extracts from some of the papers on the subject."

COMMUNICATIONS have been received from:—Dr. GEORGE BUCHANAN; Mrs. E. POWELL; Dr. J. G. PARSONS, who has SERVED; Dr. E. MORRIS; Dr. T. INMAN; AN UNION MEDICAL OFFICER; Mr. I. HARRISON; Mr. JOHN BRIDGER; Mr. J. VOSE; Mr. W. H. RANSOM; Dr. F. E. ANSEL; Dr. FREDERICK J. BROWN; Mr. R. GRIFFIN; Mr. M. T. MASTERS; Dr. ALEXANDER FLEMING; Dr. G. L. THORNE; Dr. WILLIAMS; Mr. WILLIAM MARTLAND; Mr. R. B. CARTER; Mr. A. RANSOME; Mr. E. ATKINSON; Mr. S. A. PARKER; Mr. HOPLEY;



# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

### DIPHTHERIA IN LONDON.

By THOMAS HILLIER, M.D.

My object in this paper is to call attention to a few points in relation to this disease, which have been forced upon my notice whilst analysing the cases that have come under my care at the Hospital for Sick Children in London.

*Statistics.* Diphtheria has no doubt existed sporadically, under other names, in England, almost from time immemorial. This is the opinion of many eminent medical men. Dr. Bennett read a paper on it in 1850, founded on cases which he had recently seen in London. A severe outbreak of it occurred at Haverfordwest in 1849-50; as many as two hundred cases coming under the care of one surgeon there. (*Med. Times and Gazette*, Dec. 1850). It was epidemic in Cornwall in the autumn of 1855; it was recognised by the Registrar-General as extensively prevalent in England for the first time in November 1857.

At the Hospital for Sick Children in London, there was no case registered as diphtheria until February 1857; but, in March 1856, there was one case described as "ulceration of the fauces—secondary croup". This child recovered; her malady was, in all probability, diphtheria. Every year since 1856, there have been under treatment cases recognised as diphtheria. Amongst the in-patients in 1857 were 5 cases; in 1858, 5; in 1859, 3 cases; in 1860, 4 cases; in 1861, 19 cases; in 1862, 16 cases; in 1863, 26 cases; and in the first six months of 1864, 4 cases.

There have been altogether, since the beginning of 1857, 3,318 in-patients in the hospital; amongst these, there have been 85 cases of diphtheria, 71 being primary, and 14 secondary. Of the 71 primary cases, 37, or 52 per cent., died; of the 14 secondary, 10, or 71 per cent., died.

Since February 1852, with 4,538 patients, there have been 49 cases of croup, and 4 cases of laryngitis. Of the 49 croup cases, 41 were primary, and 8 secondary, most of them to measles. Of 41 primary, 14, or 34 per cent., died; of 8 secondary, 5, or 62 per cent., died.

It will be observed, that the mortality of diphtheria has been very high in the hospital. In judging of these results, it must be remembered that all the milder cases are treated as out-patients, and that only the severe cases are admitted into the wards; and that a very large proportion of the children affected were either tuberculous or rickety, or otherwise unhealthy.

The affections to which diphtheria was secondary were, measles in three instances, scarlet fever in two, surgical operations in two, and once to Bright's disease, tubercular meningitis, pneumonia, typhoid fever, chorea, and convulsions, severally.

*Laryngeal Complications.* Of 33 cases, the larynx was involved in 23 (or nearly 64 per cent.), and not involved in 10 cases. Of the former—i.e., where the larynx was implicated—15 died, and 8 recovered; and of the latter, 6 died, and 4 recovered.

Where laryngeal symptoms existed, the days

on which they made their appearance were as follows. On the first day, in 11 cases; on the second day, in 3; on the third day, in 4; on the sixth day, in 1; on the seventh day, in 2; on the twelfth day, in 1; and on the nineteenth day, in 1.

Of the 15 who died with laryngeal symptoms, death occurred at the end of one day from the appearance of these symptoms in 1; at the end of two days, in 2; of three days, in 2; of four days, in 3; of five days, in 4; of six days, in 1; of nine days, in 1; and not until the end of seventeen days, in 1 case.

These results do not quite agree with those of Bretonneau. He says that, of 41 cases, the larynx was the seat of disease in 29; and of these, 26 died. Of my 23, only 15 died. In all the 29 cases, except 1, the laryngeal symptoms supervened before the end of the first week; and in 16 of them, on or before the third day of illness. Two of my cases had laryngeal symptoms for the first time after the end of a week; one of these died on the twenty-third day with laryngeal complication, after only four days' dyspnoea. Of the cases which died of asthenia, 1 died on the sixteenth day; 2 on the seventeenth; 1 on the nineteenth; 1 on the twenty-second; and 1 on the twenty-third day.

*Albuminuria.* Dr. Greenhow states that, "when albuminuria occurs in diphtheria, it does so generally within a few hours of its commencement". My observations in reference to 14 cases are quite opposed to this statement. Of 38 cases, albumen was present in 33, and absent in 5. In eleven other cases, the urine was not examined. Among the 38 cases in which albumen was present, there were 32 deaths, and 6 recoveries.\* Of the five cases without albumen, all recovered. In 14 cases, it was accurately determined on which day albumen first appeared in the urine. There was one case of old renal disease, in which albumen was present throughout. In no other case was albuminuria present till the fourth day, and on this day in 1 case only: it was found on the fifth day in 3 cases; on the seventh day, in 2; on the ninth day, in 5; on the thirteenth day, in 1; and on the nineteenth day, in 1. In one case, in which the urine was not examined till the sixth day, it was found to contain albumen; and in another, the urine, examined for the first time on the ninth day, contained albumen abundantly.

Dr. West states (fourth edition, p. 394), that "the presence of albumen is not accompanied with diminution in the quantity of the secretion." This does not at all accord with my experience in the cases where I have been able to get the urine saved. There has been, together with the presence of albumen, a great falling off in the amount of urine secreted. I believe this to be a more striking symptom in diphtheria than in scarlatina. As the urine becomes more loaded with albumen, the total quantity of urine secreted is much diminished. This point is illustrated in the history of the cases which I shall presently read.

The most striking difference between the albuminuria of diphtheria and that of scarlet fever is, that the former is not attended with dropsy, or, at any rate, very rarely.

Casts of the tubes are occasionally to be found in the urine, but not blood visible to the naked eye. As a general rule, to which there are some exceptions, albuminuria is present in all the severe cases; and it commonly occurs within the first week or eight days. It is not in any way dependent on obstructed respiration, inasmuch as it may occur to an extreme

\* These figures unfairly represent the fatality of cases as compared with albuminuria, because in most cases that recovered, no urine was taken, or, at any rate, not in the fatal cases, this point was nearly always ascertained.

degree when the air-passages are not implicated. Albuminuria may also be found in mild cases.

The kidneys exhibited to the naked eye but little change in many cases. In some, however, they were abnormally congested; and in most cases the cortical portion was too opaque.

On microscopical examination, transparent fibrous casts were occasionally met with in the straight tubules, and more rarely hæmorrhage. The epithelial cells of the convoluted tubules were generally too numerous; they were also granular; the granules were sometimes protein, and at other times fatty. In some cases, there was granular exudation between the Malpighian capsules and tufts. The tubules in many cases were much too distended with epithelial cells. These appearances indicate the presence of nephritis; and there is no doubt that the renal changes play a most important part in the course of diphtheria. The relative frequency of renal affection is much greater than in scarlatina; it is very much rarer to see a severe case of diphtheria unattended with albuminuria and diminished renal secretion, than to see severe scarlatina not so complicated. In fact, the worst cases of scarlatina very frequently run their course with little or no albumen in the urine.

*Fatty Degeneration of the Heart.* Another *post mortem* change, to which no attention has been directed, is fatty degeneration of the muscular fibre of the heart.\* This I have met with in a well marked degree in three cases. I am inclined to ascribe to this cause the sudden deaths by syncope which not uncommonly occur during apparent convalescence, and at a time when both the patient's friends and his medical attendants are calculating on his speedy restoration to health.

The three cases in which I observed this change in the heart's fibre were all of them rather chronic cases; two had a duration of twenty-three days each, and the third was one of eleven days only. Each of the patients died of syncope, with symptoms of asthenia, and not of asphyxia.

CASE I. The first was a boy, G. E., aged 6, who had been always rather delicate. The first symptoms observed were feverishness, drowsiness, and listlessness, with slight sore-throat. A day or two later, he was hoarse. On the fourth day, he had a bad headache, and his throat was more painful and swollen. His mother looked into his mouth, and said that his throat was covered with a white coating. On the eighth day, the boy complained still of his throat, but was less hoarse; his appetite was very bad. On the tenth day, he was languid and listless; he took an egg for breakfast, which he immediately vomited. On this day he came under my care. There was seen to be a thick white deposit on both tonsils and arches of the palate, extending down the pharynx as far as the eye could see. Pulse 108, weak; respiration quiet. The tincture of sesquichloride of iron was applied locally, and given every two hours internally. Wine was ordered to the extent of four ounces in twenty-four hours; beef-tea and milk freely. The urine at this time contained a trace of albumen.

11th Day. He was in much the same state. He had loose cough, but no laryngeal sounds. In twenty hours he passed 11½ ounces of urine, of specific gravity 1021.

12th Day. He was not quite so well. His appetite was worse; and swallowing was apparently more difficult. There was slight hoarseness. Pulse 124, weak; respiration 24, not noisy. He had passed 16 ounces of urine, of specific gravity 1015.

13th Day. He seemed rather better, and sat up to

play with his toys. Pulse 120. He passed 16 ounces of urine, of specific gravity 1017, containing more albumen.

15th Day. He took breakfast with appetite; was a little sick early in the morning. The fauces were still red and swollen; the deposit was clearing somewhat from the surface of the tonsils and uvula. His urine was seven ounces only in twenty-four hours, of specific gravity 1026.

16th Day. He swallowed much better, and had more appetite. The fauces looked better. He passed eight ounces of urine, of specific gravity 1025.

18th Day. The fauces were almost free from false membrane. The urine amounted to six ounces, of specific gravity 1020. Pulse 88, of moderate volume, weak.

20th Day. He seemed better. The fauces were quite clear. He passed six ounces of urine, of specific gravity 1024. Pulse 88.

21st Day. He took breakfast with fair appetite; was cheerful, but more languid. Pulse 104, very weak. His urine amounted to six ounces, of specific gravity 1024. The sediment, examined by the microscope, showed crystals of uric acid, some transparent medium-sized casts of tubes, and also larger granular casts.

22nd Day. He was weaker; constantly sick. His urine was only three ounces and a half in twenty-four hours, of specific gravity 1035.

23rd Day. He was still weaker. Sickness continued. Pulse very weak, 120, not quite regular. His urine was only an ounce and a half in twenty-four hours.

24th Day. He had yesterday nutritious and stimulant injections two or three times, but he did not retain them long. He was much weaker, and was sick at intervals. Pulse imperceptible. He died of asthenia at noon. The urine during twenty-four hours before death amounted to about one ounce, and was highly albuminous.

On *post mortem* examination, the fauces, pharynx, œsophagus, larynx, and trachea were found quite healthy. The lungs were also healthy, with the exception of a very slight amount of collapse. The heart was very flabby; the blood was loosely coagulated. The muscular fibre looked pale; and, when it was examined microscopically, many of the fibres were seen to be very imperfectly striated, the transverse striæ being replaced by rows of fatty globules. The kidneys were also diseased; the cortex was pale and opaque, and wider than usual; the outer third of the pyramids much congested. Microscopically, the tubules had, very many of them, the appearance of being filled with granular matter, the outlines of epithelial cells and nuclei being imperceptible; in others, the outline of cells was discernible, and they were filled with granular matter.

CASE II. The second case was that of a little boy, aged 2 years, W. S. He complained of slight soreness of his throat, with a little swelling of the glands of his neck, for about three weeks. He became thirsty, lost his appetite, and was drowsy; his skin was rather hot at first, but subsequently became of its usual temperature. About the nineteenth day of his illness, he became hoarse, and there was difficulty in his breathing; and his mother stated that, from about the tenth day, his urine was scanty in amount. He came under my care at the end of three weeks' illness. He was then pale; his skin was cool; and he was drowsy. There was no difficulty in his breathing. The tongue was coated with dirty yellow fur; and the tonsils, uvula, and soft palate were coated with a thick yellowish membrane. Pulse 140, regular. His throat was brushed with a lotion consisting of equal parts of hydrochloric acid and gly-

\* Dr. Pristowe states that he has seen this condition in one case.



cerine; and an emetic of sulphate of copper was given, which caused moderate vomiting. He was ordered a mixture containing five grains of chlorate of potash, one grain of iodide of potassium, and ten minims of liquor cinchonæ, every second hour. Wine and nourishment were given freely. He passed a comfortable night. The next day, his throat presented much the same appearance; his breathing was still unobstructed, though the nurse stated that once during the night he breathed with difficulty for about ten minutes. Over his body were some petechial spots, like old flea-bites. He seemed quite comfortable at 11 P.M.; and passed a quiet night, taking some nourishment and wine. At 7 A.M., the house-surgeon was called to him, and found him dying of asthenia. No urine could be obtained.

On *post mortem* examination, his heart was found to have a pale tint, and to exhibit, under the microscope, fatty degeneration of the fibres. There was a clot in the right cavities, of a dirty bottle-green colour. The lungs were healthy. The liver was congested. The kidneys were congested; the cortex opaque; the epithelial cells were very granular. The stomach was studded with ecchymosed spots, of the size of a split pea. The intestines exhibited a similar petechial condition. The bladder contained half an ounce of albuminous urine. The spleen was of dark colour, hard. The fauces were covered with membrane; and there was a little granular lymph in the larynx.

Dr. Wade has pointed out a peculiar change in the spleen in cases of diphtheria accompanied with purpura.

**CASE III.** A boy, aged 5, died on the eleventh day of illness. He had suffered from a chronic abscess in his arm, which was found to be connected with disease of the humerus. This had kept him weak. On the 8th of June, he was sick; and his mother thought he had a bilious attack. The next day, he vomited a quantity of green watery fluid. On the third day, he wanted to "lie about", and his skin was hot. On the fifth day, he for the first time complained of a sore throat. A doctor, who saw him the same evening, thought he was suffering either from scarlatina or diphtheria. The next day, his throat was worse, and the case was pronounced to be undoubted diphtheria. On the seventh day, he could not be induced to swallow; and the surgeon applied lunar caustic to the throat. The glands of his neck had been swollen for some time past. There was no hoarseness nor difficulty of breathing at this time.

On the eighth day of his illness, he was admitted to the Hospital for Children. He was then drowsy. His nares were excoriated, with clear discharge running from them. His lips were dry; the tongue had a bright red tip, edges, and centre, with elevated papillæ, and two lateral streaks of brown fur. He vomited several times. Both tonsils were covered with a thick white layer; the back of his pharynx could not be seen, on account of the quantity of mucus regurgitated. He had a short cough, decidedly laryngeal, but rather loose. His voice was moderately suppressed. During inspiration, there was decided but moderate recession of the anterior and lower part of the chest. His ordinary breathing was noiseless. The urine was clear, and without albumen. He was ordered ten grains of ipecacuanha, which made him sick. He was to have beef-tea, milk, and wine, and to suck ice freely; also to take, every second hour, four grains of chlorate of potash and one grain of carbonate of ammonia.

The next day, his breathing became much more difficult. A sulphate of copper emetic was given without effect. As the dyspnoea became urgent, with increasing lividity and much restlessness, the trachea

was opened by Mr. Marsh, the house-surgeon. The operation was easy; and, after expectorating a little false membrane, the patient breathed without the least discomfort. The pulse was 152, and regular. His look was rather pale and earthy. The temperature of the skin was 102°.

The next day, he looked better. The skin was, however, hot and dry. The pulse had fallen to 132; the respirations were 38 in a minute. His urine measured forty-five ounces in twenty-four hours, and was of specific gravity 1005, without albumen. It had been denser on the previous day, having a specific gravity of 1012, with a distinct trace of albumen.

On the succeeding day—the third from the operation, and the eleventh of illness—he looked no worse. Pulse 152, rather weaker; respirations 26 in the minute. The tongue was redder, but not coated. He had more pain in swallowing. The skin was cool. About 11 A.M. of this day, he was seized rather suddenly with symptoms of exhaustion. Pulse 160, intermittent, and very weak. His extremities were cold. Hot bottles were applied to his feet; and brandy, milk, and eggs were forced down his throat. He rallied, and seemed doing well again; when, at a quarter to eight in the evening, although half an hour previously he had received *per anum* some beef-tea and brandy, he died suddenly of syncope.

His urine in twenty-four hours amounted only to seven ounces, of specific gravity 1010, faintly alkaline, and containing much more albumen than it had two days before.

On *post mortem* examination, there was no exudation or ulceration on the fauces. One tonsil was swollen; and there was swelling and injection of the epiglottis and root of the tongue. The interior of the larynx was lined with a thin shreddy mucus; and the membrane beneath was abraded, injected, and uneven. In the fossæ above the ventricles, and over the vocal chords, the mucous membrane was white, from an interstitial change, and not from superficial exudation. The mucous membrane around the wound was ulcerated; and there was also an ulcer, of about the size of a pea, half an inch below the wound. The mucous membrane of the trachea was of a dusky purple tint, covered with slimy mucus, in which were entangled a good many shreds of lymph, all very small. All the bronchi and secondary divisions of these tubes contained much slimy mucus. Both lungs were emphysematous; the pleuræ of the left lung—costal and pulmonary—were much injected. The kidneys weighed together six ounces and fourteen drachms. The cortex appeared cloudy; and, under the microscope, the epithelial cells were too granular. The heart's fibres were unduly pale. Under the microscope, the transverse striæ were found in many cases replaced by fatty granules.

Sickness is always a symptom of serious import. It is generally connected with scanty secretion of urine.

*Paralysis and other Nervous Phenomena.* One circumstance, which has very forcibly struck me in reviewing the cases of diphtheria at the Children's Hospital, is the great rarity of paralysis or other nervous phenomena as sequelæ. I have not seen, in hospital practice, any case of general paralysis, or paraplegia, or impairment of vision, and only one case of loss of sensibility of the *velum pendulum palati*, and one case of strabismus. In one case, fluids passed the rima glottidis, and were rejected through the tracheal tube. In private practice, although I have not seen nearly so many cases of the disease, I have met with partial amaurosis twice, with paraplegia twice, and with nasal voice several times.

Great slowness of the pulse has been observed after

diphtheria. I have seen it in an adult fall to 50 in a minute during convalescence, but never below this. In children, I have not seen this symptom at all to a marked degree.

Maingault has analysed ninety cases of diphtheritic paralysis. Twenty-nine of the patients were children. He says that the order of frequency with which the different forms occur is as follows:—1. Paralysis of the soft palate; 2. General paralysis; 3. Amaurosis; 4. Paraplegia; 5. Strabismus; 6. Paralysis of the muscles of the neck and trunk; 7. Impairment of sensibility, without loss of motor power; 8. Loss of virile power; 9. Paralysis of the rectum; 10. Paralysis of the bladder.

There does not appear to be any proportion between the severity of the primary symptoms and the frequency or extent of these peculiar sequelæ affecting the nervous system. Severe paralytic symptoms have been often observed to follow very mild attacks of diphtheria; and some of the most severe cases have recovered without any nervous sequelæ whatever.

My experience would lead me to believe that these symptoms are relatively more frequent amongst those in easy circumstances than amongst the poor, and in adults than in children. Diphtheritic paralysis has occurred in three medical men personally known to me. It is very likely that slight paralysis would be overlooked in children too young to describe their sensations, and in whom a tottering gait would be ascribed to simple debility. The way in which this paralysis is induced is at present entirely a matter of speculation; I have not yet met with any theory which satisfactorily explains the phenomena. They are not due to imperfect aëration of the blood, or to albuminuria, or to anæmia; because they may occur where the larynx has escaped, where there is no albumen in the urine, and where there is no great degree of anæmia. They may be regarded as proving that the disease is a general, and not a local one. They present some analogy to symptoms which occasionally follow continued fever and some poisons. I am inclined to ascribe them to impaired nutrition of the nerves supplying different parts, and perhaps in some cases to fatty degeneration of the muscular fibre. The muscles of the heart I have found in three cases undergoing fatty change; and I believe the muscles of the soft palate have been found in the same condition.

**Pathology.** As to the pathology of diphtheria, there is no doubt that it is a general, and not a local disease. It may prove fatal even when the throat is quite well. There is no constant relation in severity between the local and general symptoms. The presence of albumen in the urine, and the occurrence of the nervous symptoms just referred to, are additional evidences in support of this statement.

It is not a modified form of scarlatina. This was a very favourite opinion when the disease was less known than it is now. There are, I presume, now but few practitioners who adhere to this theory. It attacks quite as frequently those who have had scarlatina, as those who have not. No doubt, it sometimes follows close upon the steps of scarlatina; it sometimes complicates that disease; and it frequently occurs as an epidemic in seasons and places where scarlatina is epidemic. The albuminuria which accompanies diphtheria sets in earlier, is seldom attended with dropsy, and less frequently with convulsions and coma.

**Diphtheria and Croup.** What is the relationship between diphtheria and croup? On this point I will not speak too dogmatically. I can only say that, in my experience in London, I see no distinction between them. Most of the cases formerly called croup

would now be called diphtheria; and many of the cases now called diphtheria would ten years ago have been called croup. In France, the distinction between the two affections is not attempted. What are the points of distinction insisted on between croup and diphtheria? The false membrane is said to affect different parts, and to differ in its physical characters. Croup is said to be sthenic, and diphtheria asthenic; croup sporadic, and diphtheria epidemic; diphtheria to attack more adults than croup; diphtheria is said to be infectious, and croup not so; diphtheria to be attended with albuminuria, and followed by paralysis, which is not true of croup. I will take each of these points in order.

In these remarks I am referring, of course, to membranous or pseudo-membranous croup, and not to spasmodic croup, or catarrhal laryngitis without the formation of false membrane.

The seat of the deposit in true croup is said to be the larynx, and not the pharynx. Until diphtheria became epidemic in England, the fauces were not carefully examined in many cases of croup. Since the throat has been examined in croup, it has often been ascertained that there are deposits of false membrane on the tonsils and soft palate, when no symptoms lead to the suspicion of their existence. I quite agree with Guersant, a French writer, who says: "The number of cases in which croup is not preceded by membranous angina, and presents itself in its most simple state, is much more restricted than was formerly supposed." He says: "Perhaps the number of such cases may amount to a twentieth; for, since a more minute attention has been paid to exploring the pharynx, some traces of false membrane are almost constantly found there at the commencement."

Dr. West gives his experience of croup from May 1839 to April 1849, before diphtheria prevailed epidemically in England. Of 23 cases, 11 were idiopathic, and 12 secondary. Of the 11 primary, 2 had a formation of false membrane on the velum and tonsils; and of the 12 secondary, 7 had such a formation.

In looking back to different old accounts of croup, I find that a certain proportion of them are always described as having a deposit on the fauces, whilst in many cases probably no attention was directed to that part. Of the autopsies recorded at the Hospital for Sick Children in four years, there have been only two cases in which a false membrane has been found in the larynx whilst the fauces had escaped;\* and one of these was pronounced to be diphtheria, because of the existence of albuminuria, and death from asthenia. During the late epidemics, it has not been at all infrequent to have cases which everybody admitted to be diphtheria beginning with laryngeal symptoms, whilst the fauces and pharynx were attacked at a later period. This was true of a medical man whose case I recorded in the *Medical Times and Gazette* for February 1861. He was seized on March 31st with all the symptoms of severe laryngitis. On the 2nd of April, laryngotomy was performed; and it was not until a day or two later that any membranous deposit could be seen in the pharynx; it never appeared on the tonsils or soft palate. No one doubted that this case was one of diphtheria, although it was certainly pure croup, if the primary seat of exudation is a distinctive mark in these diseases.

In the next place, the anatomical characters of the deposit will not distinguish these affections. In diphtheria, you may have as tenacious and plastic a false membrane, with as much injection of the ad-

\* It is quite probable that in some seasons and some places the pharynx has been more constantly attacked than others. I have thought that the existence of an epidemic of scarlatina may increase this tendency to implicate the pharynx.



joining mucous membrane, as is ever seen in true sporadic croup. Microscopically, there is no distinction between the exudation.

It has been thought that diphtheria more frequently leads to ulceration than croup; but ulceration was very commonly met with from croup before epidemic diphtheria was known.

As regards the sthenic and asthenic character of the diseases, croup of thirty years ago was either sthenic or asthenic, according to the patient's previous health, and the circumstances under which he was attacked; and diphtheria of the present time is sometimes moderately sthenic. Diphtheria is epidemic, and croup is not so, it is said. This is begging the question. I believe diphtheria to be epidemic croup; and, just as in other diseases, the characters are modified during the prevalence of an epidemic. The disease is more asthenic; it attacks a larger number of adults; lays hold of the constitution more severely; and is accompanied with graver sequelæ. Moreover, if the pharynx is more frequently attacked in the epidemic than in the sporadic cases, this is only analogous to what is seen in scarlatina, in some epidemics of which the throat is much more seriously affected than it is in others. The swelling of the submaxillary glands is no mark of distinction; it often exists in croup, and is often only slight in diphtheria.

With regard to albuminuria as a mark of distinction, this symptom, I believe, occurs in both forms of disease. It was recognised in diphtheria for the first time in 1856, by Dr. Wade of Birmingham. The difficulty now is to meet with what will be admitted as a pure case of croup. I have found albuminous urine in cases of disease beginning in the larynx, with a considerable amount of sthenic reaction, and characterised by the exudation of a tenacious false membrane. Such cases would formerly have been regarded as typical of true croup.

In the last place, we come to the peculiar disorders of innervation which have been observed after diphtheria in the late epidemic. To judge of the value of these as distinctive symptoms, it must be remembered that, even since they have been recognised and accurately described, their occurrence is found to be comparatively rare. At the Children's Hospital, only two very slight cases of it have come to my knowledge, out of upwards of 80 cases, with more than 10,000 out-patients coming annually to the hospital. Maingault was only able to hear of 29 cases in children. Again, although epidemics of diphtheria have been described from the time of Aretæus downwards, it was not until 1834 that any frequent connexion was observed between paralysis and diphtheria by M. Orillard. Previously to this, Chomel and Ghisi in 1749, Bard of New York in 1771, Sédillot in 1810, and Guimier in 1826, had reported cases of paralysis following diphtheria; but they were lost sight of by later writers, or looked upon as mere accidental coincidences. It need not, then, excite much surprise, that when croup was comparatively rare, paralysis was not observed to follow it. It may either be that, until the disease became epidemic, these sequelæ did not occur; or, what is more probable, that, occurring but rarely, the connexion between them and the primary illness was overlooked. The very gradual manner in which M. Trousseau came to recognise the connexion between diphtheria and these paralytic symptoms, after he had seen several cases of the kind, is well described in his *Clinique Médicale*, vol. i.

The last point of distinction insisted on between croup and diphtheria is, that the latter is contagious, whilst croup is not so. I quite admit that diphtheria is contagious. One of the most remarkable evidences which I have met with of its contagious property was afforded by the case of an eminent surgeon, who has

kindly afforded me the following interesting account of his case.

CASE of J. L., surgeon, reported by himself. "In the first week of August 1862, I was asked to perform tracheotomy on a child *supposed* to be suffering from croup, but, *in reality*, as my subsequent symptoms showed, affected with *diphtheria*. I had at the time a puncture on the top of the thumb of my right hand, and next day felt it painful. The day after, I observed a small pustule, which was punctured and poulticed; and, a day or two later, I removed the epidermis, and found the dermis beneath in the condition of a peculiar dark slough. This sore had very peculiar characters; viz., a total absence of any tendency to supuration; and excessive pain, which quite prostrated me by its severity, and obliged me to take to bed.

"About eight days after the first symptoms, feeling the thumb less painful, I was able to go about. One evening, I drove about seven miles on the outside of a carriage; and, though the air was very mild, I felt it uncomfortably, and next morning found one of my tonsils affected with redness and swelling, with a white patch on it, and extremely painful. This state of the tonsil was accompanied, like the sore on the thumb, with great prostration; and I was compelled to return to bed for two or three days. I then went to Torquay; and, though very feeble, accomplished the journey satisfactorily; but I was there prevailed on to apply solid nitrate of silver to the tonsil, and this produced excessive aggravation of the difficulty of swallowing. After about a week at Torquay, I ventured out for a walk on a fine hot day, which nevertheless gave me tonsillitis of the other side, in spite of a thick handkerchief round my neck. I was thus thrown back another week, when I was convalescent as regards the throat and general symptoms; but the small sore on the thumb was not healed, the slough having separated very slowly, and the ulcer showing extreme languor in cicatrising, and remaining remarkably sensitive. It healed up completely in about a month from its first appearance, and I then considered myself perfectly well. A month later, however—viz., in the last week of September—I found that liquids which I swallowed tended to pass up the posterior nares; and the same occurred with air, when I blew air out of my mouth. My articulation also became somewhat thick, from a sort of sluggishness of the tongue, which also tingled slightly. About the middle of October, tingling and slight impairment of sensibility appeared in the fingers and feet, and crept up the lower limbs until it reached the gluteal region. This I describe as tingling, rather than numbness. There *was* numbness, but tingling was the prominent feature. I also found that I could not stoop so low as usual without bending the knees, on account of painful stiffness about the calves and hams. Lastly, at the beginning of November, I found I had difficulty in preventing myself from tripping and falling in walking down stairs; and progression on a plane surface was decidedly impaired. I had at this time to deliver an introductory lecture, which I just managed to get through; and since that time the symptoms have gradually subsided, but very slowly, so that even now I am not quite sure that my velum acts quite as it used to do; and now and then, after much mental exertion, I feel a slight tingling in the little fingers, which I attribute to the dregs of this strange disorder."

It is interesting to observe, that the case of laryngeal mischief for which tracheotomy was performed was regarded as croup, until the peculiar symptoms which appeared in the surgeon were manifested. This I find constantly to occur, that cases are called croup until a late period, when some symptom shows

itself which we are not taught to connect with croup, or till other cases occur in the family affecting the pharynx more decidedly, and coming up to the conventional description of diphtheria.

Admitting, then, that diphtheria is contagious, what is to be said of croup? I know nothing of its contagiousness. Of course, the chances of contagion are much smaller when a disease is sporadic, than when it is epidemic. That diphtheria is infectious, as well as contagious, appears to be pretty well proved; and this is the strongest argument in favour of the non-identity of the two diseases. But even diphtheria is not highly infectious, especially when sporadic. Single cases constantly occur without any tendency to spread to others.

After fully considering all the evidence *pro* and *con* on this question, I am inclined to believe that most of the cases formerly called true croup in London were identical with what is now called diphtheria. At the same time, I am willing to admit the existence, as a rare disease, of laryngitis with the formation of false membrane, not anatomically different from laryngeal diphtheria—a disease having all the characters of a simple local inflammation, and not the characters of a general specific disease.

The following case illustrates my statement, that what used to be called croup is now called diphtheria. If a distinction is maintained, I confess I do not know by what name such a case as this should be called.

CASE. C.H., aged 5, a moderately healthy child, was supposed to catch cold on the evening of March 1st, whilst returning from church. She was slightly hoarse afterwards. On the evening of March 2nd, she woke up, was sick, had some difficulty in breathing, and a croupy cough. She did not complain of sore-throat.

When admitted into hospital, on March 3rd, she had distinct laryngeal breathing and croupy cough. There was no redness, swelling, or sign of exudation about the fauces. Two leeches were applied to each side of the larynx. Dyspnoea increased, and tracheotomy was performed.

The patient appeared to progress favourably. On the 9th of March, six days after the operation, her urine was found to be albuminous.

March 10th. Slight signs of pneumonia appeared.

March 13th. The patient's pulse was 160; respirations 60.

March 14th. Pulse 140; respirations 50. The urine was more albuminous.

March 18th. The urine contained a very large amount of albumen. Under the microscope, some medium-sized granular casts were seen. Pulse 154; respirations 56.

During the next night, she continued in much the same state, breathed very rapidly, and died at 4.30 A.M., of asthenia.

On *post mortem* examination, the pharynx presented no abnormal appearance. The epiglottis was thickened and congested. The whole of the mucous membrane of the larynx and trachea was of a dark red colour, and studded with a dirty grey granular exudation. The lymphatic glands were large and brittle. There was some lobular pneumonia.

This case was regarded as croup at first, inasmuch as it commenced in the larynx, with all the symptoms characteristic of that disease. Although the pharynx and fauces were never covered with exudation, it was subsequently called diphtheria, on account of the renal complication and gradually increasing asthenia. If this case was true croup, and not diphtheria, it shows, at any rate, that albuminuria and scanty secretion of urine will not distinguish one disease from the other.

*Treatment.* I now come to the subject of treatment, on which I have not time to say much. Unfortunately, no specific has been found for the disease. We must study in what way it usually destroys life, and endeavour to counteract this tendency. This is the true rule of practice in all the acute specific diseases. Diphtheria kills either by asphyxia from obstruction to the entry of air into the lungs; or by asthenia from the intensity of the general disease; or from derangement of the nervous system, with imperfect elimination from the kidneys; or from syncope, with fatty change in the heart. The general disease should be treated on the same principles as other acute diseases.

In children or adults of good constitution, where the symptoms have been moderately sthenic, and the tendency to death by asphyxia is manifested, I have seen decided benefit from the use of calomel in small doses—say half a grain every two hours. In some of the worst cases that I have seen recover, this treatment has been adopted. I have been surprised to find that the patients thus treated have recovered quite as rapidly, if not more so, than those treated on a less lowering plan, and have not been more reduced by the disease than others. The presence of a small quantity of albumen in the urine has not prevented my continuing to use it. I have given it until there has been free discharge of green stools, or sponginess of the gums. Trousseau suggests that the benefit derived from calomel is due to its local action. I have given the calomel treatment in thirteen of my worst cases, and have had successful results in seven of them; two being cases of tracheotomy, and the symptoms at one time being of apparently the most desperate character. In six of the successful cases, there was decided laryngeal obstruction; and in three, albuminous urine. Whilst giving calomel, I do not omit nourishment and wine in some cases.

I would not advocate the mercurial treatment in a rickety or tubercular child, nor in cases of secondary diphtheria; but, in cases which begin in previously healthy children, with heat of skin and a good firm pulse, and without signs of great prostration, I believe it is the most effectual plan of treatment.

When there are heat of skin and a firm pulse, if calomel be not given, a simple saline, such as citrate of potash or acetate of ammonia, may be given. The bowels should be acted on by a simple aperient; and warm fomentations applied to the throat externally, and steam internally.

In some cases, ice will be very grateful to the patient, and may be freely allowed. It has been recommended as a specific. I cannot, however, say that I have seen much benefit from its use.

If the disease set in, as it more commonly does, with a feeble pulse, and the throat have a dusky redness, and there be considerable prostration, wine should be given in fair quantities, with a nourishing diet; and chlorate of potash, with liquor cinchonæ, every two or three hours.

In local applications I have not much faith. However, if the deposit begin on the fauces, and its lower limit can be seen, I recommend the free application of equal parts of hydrochloric acid and honey, by means of a camel's-hair brush. The lotion should be painted not so much on the false membrane as on the inflamed mucous membrane immediately adjacent. Except in cases where this could be done, I have seen no benefit from caustics. At a later period, the use of Condy's solution, in the proportion of one part to about thirty or forty of water, is sometimes useful to correct fætor, if this exist, but not otherwise.

When there is laryngeal obstruction, as evidenced by suppressed voice, by stridulous inspiration and



expiration, and recession of the soft parts of the thoracic walls during inspiration, if the child is becoming restless, starting up impatiently with a wild distressed look, and there is commencing lividity of the finger-nails and lips, it is time to consider the propriety of tracheotomy. That this operation has saved life in diphtheria, there can be no question; it has proved successful in the case of some patients who would certainly have died in a very few hours, or even minutes, had not the operation been performed. In many other cases it has prolonged life, and rendered death more easy; the death after the operation being commonly by ashenia, instead of slow asphyxia, than which no death is more agonising.

That a large number of cases should die after operation might be anticipated. Opening the trachea has no effect in checking the extension of exudative inflammation downwards; so that the patient still runs the risk of dying from extension below the seat of operation, the most common cause of death; as well as of dying from the general effects of the disease on the nervous system, the kidneys, and the heart. There is also the risk of pulmonary collapse, with or without pneumonia. This is a very common cause of death, especially in very young children. The tendency to this is much increased by a very flexible state of the chest-walls, so that it is worst in rickety children; and the difficulty of getting rid by coughing, without the aid of the larynx, of bronchial secretion, also favours the occurrence of pulmonary collapse. In addition to this are the risks incident to all surgical operations, of erysipelas, hæmorrhage, and so forth, to say nothing of unskilful operations. Incessant watchfulness, by experienced attendants, is also absolutely essential, to prevent clogging of the tube, or its slipping out of the trachea during a fit of coughing, and other misadventures. It is important to keep the air warm and moist. With all these dangers, it need not excite surprise if a large proportion of the cases operated on do not recover. I have a distinct account of thirty-two cases. Of these, nine recovered; seven were children, and two adults. Three of them were in the Children's Hospital, one in University College Hospital, and five in private practice; of which four were communicated to me by Mr. Marsh, house-surgeon to the hospital, under whose care they had been. Of the cases that died, four lived a week or more, two lived three days, five lived two days, and eleven died within twenty-four hours of the operation.

In nearly every case, great relief was afforded; so much so, that the result in nearly every instance satisfied me that the operation was justifiable merely as a palliative measure. *The younger the child, the less chance is there of a favourable result.* Three of the successful cases were of children four years old; three were five years old; and the age of the other is not stated. In Dr. Buchanan's successful cases,\* the ages were, one 21 years, one 4 years, two 5 years, and one 6 years.

In regard to the adult on whom laryngotomy was performed, Dr. Jenner says: "There is not a shadow of doubt on my mind that he would have been dead in two minutes, had his larynx not been opened. I never saw any one so manifestly brought back from the threshold of death. His complexion had that bluish pallor which precedes immediate dissolution. I felt his pulse failing until it was imperceptible. His eyes closed, and his diaphragm made those convulsive contractions which indicate that respiration is about to cease, when the knife entered the larynx, and air was drawn by what really seemed to be the last efforts of the diaphragm."

Some of the children on whom the operation was performed were as near death, apparently, as the gentleman whose condition I have just described. This patient was a medical man; and he intimated in writing, several hours before the operation, a strong desire to have his air-passages opened; and, since his recovery, he states that no one can conceive the distress which he suffered during the night preceding the operation—suffering which, he thinks, ought to have been prevented by an earlier performance of bronchotomy.

In children, laryngotomy is not advisable, because the crico-thyroid membrane does not admit of a tube large enough for purposes of respiration. In the adult, the operation of laryngotomy is to be preferred to that of tracheotomy.

The time at which the operation should be performed is a matter of some importance. As soon as it is evident that there is mechanical obstruction to the entrance of air by the larynx, and that the difficulty is increasing, the sooner the operation is performed the better. By delay beyond this period, the sufferings of the patient are increased, his powers exhausted, and his chance of rallying diminished. The most important guide to the amount of obstruction to the entry of air, is the extent to which the intercostal spaces and the inner part of the supraclavicular region recede during inspiration.

A great mistake is, I believe, made in the after-treatment of the cases in which tracheotomy is performed. It is very commonly assumed that, after this surgical proceeding, no medical treatment is required; and nothing is done to check the extension of the disease below the wound. In the two successful cases which I had under my care at the Children's Hospital, I continued to give small doses of calomel after the operation, until green stools were produced. If calomel be not given, the iodide of potassium and chlorate of potass may be administered; or a saline mixture, with a very small dose of ipecacuanha or antimony. I believe that stimulants should be given in moderation, and that it is quite possible to give them in excess. The amount of stimulant should depend on the force of the pulse.

Dr. Fuller, in his paper on Tracheotomy in Croup, in the fortieth volume of the *Medico-Chirurgical Transactions*, refers to the importance of not suspending medical treatment when the trachea has been opened. He reports seven cases of tracheotomy in croup, three of which terminated favourably; and in all of these calomel and salines were given after the operation had been performed.

There are, no doubt, a considerable number of cases of diphtheria in which the disease assumes so very asthenic a type, that anything like a lowering plan of treatment does not seem justifiable. In these cases, I would use chlorate of potass and carbonate of ammonia.

I should not strongly advise tracheotomy in a child whose chest-walls were extremely pliable from rickets, nor in children under twelve months of age; but in such cases as these the operation is, I believe, sometimes justifiable as a palliative measure.

Trousseau says that he has performed tracheotomy two hundred times, with success in about one-fourth. Bretonneau saved six out of twenty; Velpeau, two out of ten; Spence, six out of thirteen; Dr. G. Buchanan of Glasgow, five out of fifteen; Dr. Steiner of Prague, two out of six.

In two cases that have come under my observation, one a child about fourteen months old at University College Hospital, and the other a child five years old, it has been necessary to retain the tube for months, in consequence of the dyspnoea which was produced on the removal of the tube. The younger child lived

\* Reported in the *British Medical Journal*.

for several months; and died of caries of the dorsal vertebra, with inflammation of the trachea and bronchi. Just above the incision in the trachea, there were two ulcers about the size of small beans, which slightly narrowed the trachea; the vocal cords were healthy. In the elder child, operated on many months ago, attempts have been made to dilate the laryngeal aperture by passing upwards from the wound into the larynx a piece of seaweed which swells; this has been left for several hours; and under this treatment, the voice has been almost restored, and a good deal of air is constantly passed through the rima glottidis. The child can now breathe for twenty-four hours with a cork in the cannula; but she has not yet been left at night without the tube, on account of the alarming dyspnoea which several times followed the removal of the tube. It is hoped that shortly the tube may be laid aside.

There is at the present time in St. Bartholomew's Hospital, a child, aged 15 years, whose trachea was opened for diphtheria about three months ago. She had quite recovered her voice, and could breathe very comfortably with the cannula corked; but could not bear its withdrawal for more than a few minutes without extreme dyspnoea until a few days ago. She now breathes perfectly without the tube, and the fistula has healed. It has been suggested as an explanation of these symptoms, that when the tube is withdrawn, the sides of the trachea near the wound collapse and prevent the proper passage of air.

Dr. Steiner of Prague records a case of tracheotomy for diphtheria in which recovery took place; but the child could not breathe without the tube. The patient died at the end of nine months of hydrocephalus; and, on *post mortem* examination, it was found that the cavity of the larynx was entirely obliterated by a firm, almost cartilaginous, mass of cicatricial material, which must have been due to deep ulcerations following the croupal exudation.

Many persons, before they resort to tracheotomy, make it a rule to give an emetic. I cannot say that I have seen much benefit from this plan of treatment. If given at the onset, emetics are, I believe, often of service; but, after there has been laryngeal obstruction existing for some time, and the patient is becoming exhausted from a want of oxygenated blood, the emetic is not likely to detach the membrane, and serves only to increase the exhaustion without improving the respiration.

Dr. Wade of Birmingham attaches great importance in the treatment of diphtheria to the promotion of the urinary secretion, which, as he correctly states, is often very deficient in amount. With this object, he recommends the copious administration of pure water or other diluents, and iodide of potassium in two-, three-, or four-grain doses, every two or three hours, with five- to ten-grain doses of chlorate of potass. He says that he has known no case of fatal termination where this plan has been carried out. I have tried it in two cases, both of which terminated fatally. I have also tried the tincture of sesquichloride of iron in free doses, and cannot say that I have been satisfied with the results obtained under this plan of treatment.

**CONCLUSIONS.** Diphtheria, when attacking the larynx, is not anatomically different from croup as known in London twenty years ago. There have been during the last eight years in London, an increasing number of cases characterised by asthenia, in which the fauces are the primary seat of disease. The general nutrition of the body has been much affected in these cases; the kidneys and the nervous system have frequently suffered.

Diphtheria is, like croup, either a primary disease, or secondary to another.

Diphtheria is infectious; but its infectious properties have not been strikingly seen at the Children's Hospital in London.

No specific has been discovered for the treatment of diphtheria. Just as in croup, mercury has in some cases been of marked benefit; but it is a remedy which cannot be safely used in all cases. Chlorate of potash has also been of service in some instances. Alcoholic stimulants in moderation have been useful; but, even when given in very large quantities, they have not counteracted the tendency to syncope, and have sometimes appeared to aggravate the renal complications. No marked results have been obtained from the use of ice, iodide of potassium, or the perchloride of iron. Local applications are regarded as of secondary importance, except at the outset, or to correct fœtor at a later stage.

When asphyxia is imminent, tracheotomy, or, in the adult, laryngotomy, is indicated. This operation has saved the lives of some, and has delayed the deaths of others, and rendered them less painful. The chances of its success are *cæteris paribus* much influenced by the age of the patient, and the firmness of his chest-walls. The operation is useful only by admitting air to the lungs below the narrowest part of the air-passages, thus giving a longer time for nature, assisted by art, to throw off the disease. It has no power to arrest the progress, either of the local lesions or the general disease. Internal treatment should therefore not be suspended after the performance of the operation. It is useless to resort to the operation, unless the services of judicious attendants and favourable conditions surrounding the patient can be subsequently secured. As much depends on the after-treatment as upon the skill of the operator. The tube which has been found most useful, is a double one; the outer tube is bivalve, opening laterally, which when closed, is very narrow, and can be introduced very readily into the wound in the trachea; the inner tube has a nearly circular aperture, with a fenestra on its convex aspect looking upwards. The aperture of the tube should be as large as the aperture of the narrowest part of the patient's natural air passages.

## INVESTIGATION OF EPIDEMIC AND EPIZOOTIC DISEASES.

By WILLIAM BUDD, M.D., Clifton, Bristol.

[THE following memorandum on a scheme for the investigation of epidemic and epizootic disease, drawn up at the request of the Committee appointed for that object at the annual meeting of the British Medical Association held in London in August 1862, was read by Dr. Budd. It should have been presented to the annual meeting at Bristol in 1863, but was unavoidably postponed.]

I am of opinion that the Committee appointed by the Association to investigate the laws of epidemic and epizootic diseases, would best advance the object in view by issuing, in the first instance, a series of preliminary reports, setting forth the exact state of our present knowledge as to the diseases which are to be the subjects of inquiry.

By laying down, clearly, what is already known, and what remains to be determined, and thus defining the principal *desiderata*, the Committee would give a definite aim to whatever future investigations it might hereafter desire to recommend or undertake.

The course here suggested, was the course taken by the British Association at the commencement of its scientific labours.



At its first meeting, the two following resolutions were unanimously passed.

1. "The General Committee shall appoint at each meeting, committees, consisting severally of the members most conversant with the several branches of science, to advise together for the advancement thereof."

2. "The committees shall recommend reports on the state and progress of particular sciences to be drawn up from time to time, by competent persons, for the information of annual meetings."

The result was the series of admirable reports, prepared in some instances by committees, and in others by individuals, which fill the early volumes of the *Transactions* of the Association, and which cover nearly the whole field of physical science. Many of these reports would be excellent models for our own Committee to follow.

In recapitulating what the Association had done, in his inaugural address to the meeting held at Cambridge last year (1862), Professor Willis referred in emphatic terms to these reports, as having had a most important influence on the advancement of science.

The reports on magnetism and on the tides, respectively, may be particularly mentioned in illustration here, as having originated a record of phenomena, with definite aims, and extended by concerted action to the whole globe, which has already led to generalisations of the highest importance, and will probably pave the way to future discovery.

In regard to epidemics, my own attention has hitherto been almost entirely confined to that great group of epidemic diseases which may be shown to be contagious or communicable.

These diseases, as being open to more definite conclusions than can be come to as to the rest, in the present state of knowledge, might perhaps advantageously occupy the attention of the Committee, in the first instance.

If we had once attained to a clear view and a true theory of all the phenomena of the contagious group, we should be much better prepared to deal with the far more difficult problems which attach to the study of the others.

In regard to the former, the following appear to me to be the principal points on which it is of the highest importance to obtain precise data, and as to which a report should be expected to give the actual state of our knowledge.

1. *The nature of the evidence showing the disease that may be the subject of inquiry to be contagious or communicable.*

2. *Whether such disease admits of being artificially propagated by inoculation or otherwise; and if by inoculation, what are the morbid products which are capable of conveying the virus?*

3. *Through what surface or surfaces the virus may be shown to enter the body, and to leave it when the disease is taken in the natural way.*

4. *Whether the disease is distinguished by eruptions, external or internal, or by ejecta more or less characteristic.*

5. *At what periods of its course, if this be ascertainable, the power to propagate by contagion begins and ceases.*

6. *Through what media the specific poison passes from the infected to the non-infected; whether it be transmissible by fomites, by mediate intercourse, or by flies, birds,\* or other agencies.*

7. *Whether the specific poison is cast off in a form in which a considerable portion of it is likely to pass*

into the dried state; and if so, whether there are any facts tending to show how long, when in this state, it may retain its noxious powers.

8. *Whether the individual disease under inquiry has a period of true incubation; and if so, what are its length and limits?*

9. *Whether one attack, as in small-pox and many other contagious diseases, preserves against future attacks.*

10. *Whether, in the case of human disease, animals as well as man are susceptible; and if so, what animals? Or, in the case of animal diseases, whether more than one species; and if so, what species?*

11. *What is the evidence, if any, as to the particular country or region in which the disease first appeared?*

12. *What are its present geographical limits?*

13. *Whether there is any evidence, and if so, what evidence, of its modern or recent introduction into, and establishment in, countries previously exempt?*

14. *How far any such disease may have been prevented from invading new countries, or from spreading from any particular centre, by measures directed against contagion.*

15. *Whether it is capable of assuming different types, so as to cause maladies which, although diverse in outward guise, are only the same disease in different forms.*

16. *What is the nature and what the true value of the evidence supposed to show that the specific poison of a contagious disease may be originated spontaneously, or be generated "de novo"?*

17. *What is the general proportion which cases that can be traced to communication with the infected, bear to those that cannot be so traced? and whether, in human diseases, there is any difference in this respect between town and country.*

18. *In what degree the prevalence of any given disease is affected by the surrounding sanitary conditions, by density of population, etc.*

19. *And lastly, as of secondary and minor importance, data tending to show in what manner the action of each specific poison is affected by conditions relating (a) to the individual, such, for instance, as age, sex, state of health, etc.; (b) by conditions relating to the poison, such as greater or less malignity of the case from which derived—greater or less concentration, etc.; and (c) by conditions independent of the individual and of the poison, but acting on both, such as climate, weather, soil, etc.*

In the determination of conditions of this order, statistics find their true province.

It is obvious, on the most cursory glance, that the questions just enumerated differ greatly in importance.

I have put in italics those which, I myself, consider the most vital.

What we most want to know in regard to this whole group of diseases is, where and how the specific poisons which cause them, breed and multiply.

In small-pox, we have ocular proof that the poison breeds in the living body, and it may be assumed as certain, that the same is the case with the other diseases of this family which agree with small-pox in certain leading characteristics.

This being so, the question arises—granting that these poisons do breed in the living body—whether they may also be generated elsewhere.

Numbers 8, 9, 10, 11, 13, and 14, and in a less degree, number 12 also, are clearly of the greatest significance in their bearing on the answer to be given to this question.

Some parts of the general inquiry might advantageously be made the subject of a separate and independent report. Such is especially the case, for instance, with the question just referred to, as to whether,

\* In the recent epidemic of variola ovina, in Wiltshire, stallions are supposed by Professor Simmonds to have had a principal hand in propagating the disorder.

namely, the poisons of specific contagious diseases ever originate spontaneously.

After giving many years of time and thought to an examination of the evidence bearing on this question, I have myself come to the conclusion that there is no proof whatever, that they ever do so.

That the evidence, in fact, on which the contrary conclusion is founded is negative only; that evidence of precisely the same order, only to all appearance still more cogent, would prove animals and plants, even of large species, to originate spontaneously; that this evidence is therefore of no weight; and lastly, that, as in the case of plants and animals, all the really important facts point the other way, and tend to prove that these poisons (to use a term which is probably provisional only), like animals and plants, however they may have once originated, are only propagated now by the law of continuous succession.

Opinions like these are no doubt at present those of a small minority.

A very large, and by far the most influential school in this country—a school which probably embraces the great majority of medical practitioners and the whole of the “sanitary” public, holds the exact contrary, and teaches that sundry of these poisons are constantly being generated *de novo* by the material conditions which surround us.

In regard to the great work of prevention, it is obviously of the first importance to determine with which of these two parties the truth really lies; for so long as opinion remains divided as to this cardinal point, it is vain to hope for the general adoption of any definite scheme of preventive measures. A report on the subject by a really competent hand, might do much towards settling public opinion in regard to it.

Certain other points would admit of being studied experimentally. I would cite as an example, the influence of heat on contagious poisons.

Rather more than twenty years ago, the late Dr. Henry showed, by a series of decisive experiments, that the powers of the small-pox poison are destroyed by a temperature of 212° Fahrenheit. These experiments have since been repeated, and extended by a committee at York, who have published a very valuable report on the subject.

In some experiments of my own on the vaccine virus, I have ascertained that the temperature of boiling water is fatal to that virus also; but that the temperature to which meat is raised in being roasted, and in some other modes of cooking, leaves these powers intact.

It would be well if this inquiry were extended to other contagious poisons; and to be comprehensive, it should include the effect of cold also. Among the poisons that might be selected, I would mention, particularly, the poison of cattle affected with “charbon”; that of the foot and mouth disease; of the pleuropneumonia of oxen; of the Rinder-pest, or cattle-plague; of variola ovina; and of glanders, as poisons which it would be very desirable to submit to these same tests.

As regards the whole subject of the investigation of contagious epidemics, perhaps the best course would be not to deal with it collectively, but to report at first, in reference to the several heads enumerated above, and any others that might appear important, on one or two typical members of the class.

If I might venture to make a suggestion, it would be that the following diseases should be thus dealt with in the first instance,

1. Typhoid or intestinal fever.
2. Maculated typhus.
3. The Rinder-pest, or cattle-plague.

4. The foot and mouth disease of oxen and other animals.

5. The pleuropneumonia of cattle.

6. The variola ovina or small-pox of sheep.

It is not without design that in this list the epizootics are made to outnumber the diseases of man.

The obvious reason is that, in regard to everything which concerns the genesis and reproduction of specific contagions, it is much easier to obtain sure and precise data in the case of animals than in that of man.

In a paper on Malignant Pustule, which I read at our last annual meeting (1862), I pointed out some of the many advantages which these diseases offer to the inquirer, and from which we are for the most part debarred in our own case.

These facilities are illustrated in a very striking way by the list of epizootics just suggested.

Not the least among them is the fact that, three out of four of these epizootics, if not all four, may be propagated by inoculation, and admit, therefore, of being studied *experimentally*.

Two of them—the Rinder-pest, and the variola ovina—have an interest of another kind, which is of the highest possible importance in relation to the general inquiry.

The morbid changes which are characteristic of the Rinder-pest, or cattle-plague, bear in every respect so close a resemblance to those of typhoid or intestinal fever in man, and the eruption of the variola ovina is in its appearance and distribution, so close a counterpart to that of human small-pox, that many observers of the first eminence have been led in either case, to consider the human disease and the animal disease to be identical.

And yet, as far as present evidence goes, it appears, not only that this is not so, but that both these farm plagues present the remarkable and deeply significant characteristic (a characteristic which is observed indeed in many other members of the same family) of being absolutely peculiar to the species of animal in which they, severally, occur.

Both also—agreeing in this with small-pox, and with contagious fevers generally—are diseases which happen only once in life. So that the poison of the variola ovina, for instance, not only is incapable of breeding in the body of any other animal, but cannot even breed in the body of the sheep more than once.

This singular ovine malady, and the pleuropneumonia of cattle, have also an extreme importance in relation to the general inquiry, as examples of diseases which have been introduced into this country, in our own day, in consequence of the removal of the restrictions which formerly almost entirely prevented the importation of live stock from those parts of Europe in which these diseases have immemorially prevailed.\*

The importance of this fact is still further enhanced by the opposite fact that, the Rinder-pest has hitherto been excluded, not only from our own shores, but from countries actually continuous with those in which this epizootic is most rife, by measures expressly founded on the idea that the disease spreads exclusively by contagion.

Among human diseases, I have specified typhoid or intestinal fever, and typhus, for several important reasons.

1. Because of the great intrinsic interest of both, and of the large annual mortality occasioned by them.
2. Because of the wide difference of opinion at present prevailing as to their origin and mode of spread—

\* There is reason to believe that pleuropneumonia has been imported into England more than once; but if so, it had died out again before its recent introduction. For the variola ovina, see the author's essay on the subject, which formed the Address in Medicine read to the Association in August 1863.



ing, and the very great importance as regards prevention, that these differences should be reconciled or cancelled.

And 3. Because there already exists, in regard to both, scattered abroad in books, written in many tongues, a far greater mass of precise data touching the points at issue, than people generally are at all aware of, and which are fully ripe for generalisation.

In order to render the inquiry on which the Association is about to enter, really comprehensive, it would be necessary to associate with the study of epidemics, that of the diseases caused in man and animals, by living parasites, external and internal.

A fuller knowledge of the phenomena attaching to the dissemination of the prolific and minute germs of these parasites, could not fail to be of great use in helping to the true interpretation of the phenomena which attach to the strictly analogous dissemination of the equally prolific, and equally minute genus of contagious poisons.

In particular, it would be of the highest value, in showing by data, that could not be gainsaid, what is the real value of the negative evidence now so implicitly relied on, as an indication of spontaneous origin, and as opposed to the law of propagation by continuous succession.

Additional reasons for putting the parasites and the contagious together in such an inquiry are, 1. That at many points the two blend insensibly one into the other; 2. That, with the advance of knowledge, diseases are constantly being transferred from the group of common contagions, to the group of parasites; and 3. That there already exists among the most advanced thinkers on these topics, a shrewd suspicion that the two groups will eventually coalesce, and be found to be in their essence, identical.

The only other suggestion I would venture to offer to the Committee is, that in the conduct of their inquiries it would be well to keep the great object of *prevention* constantly in view.

And this, not only because prevention is the ultimate aim of all investigations of this sort, but because, in a degree far greater than is commonly supposed, preventive measures may be made a test of the truth of theory itself.

What I mean here, will be best illustrated by an example. The example I shall take is, that of the Rinder-pest, or cattle-plague.

In Austria, Prussia, and other countries immediately contiguous with those in which that fatal pest is most destructive, a very stringent code of regulations for the prevention of the disease is enforced, which is founded, as before remarked, on the idea that this disease is propagated exclusively by contagion. Wherever these regulations have been thoroughly acted upon, there the progress of the pest has been stayed. Wherever they have been neglected, the disease has spread with fearful rapidity. The perfect success of the method is here one of the best of all proofs of the truth of the theory.

In conclusion, I would remark that, such a series of reports as that now suggested, drawn up by able men, and with a well concerted unity of design, could not fail, even if limited to the topics hastily indicated in this brief memorandum, to be of great value to science.

From such an inquiry, so conducted, generalisations of a high order, and of the utmost practical importance, which are now the possession of a few only, would be sure to emerge with a clearness and distinctness to compel universal assent.

Were there time, it would be easy to enlarge on all these topics of inquiry, and to add many others to their number. As I only received notice that this memorandum would be required of me, so lately as

the 17th of this present month, I must content myself with the few brief and imperfect notes which I have here so hastily strung together.

The great pressure as to time under which they have been written, will, I trust, be received as a sufficient apology for the many imperfections as to form and manner in the language in which they are expressed.

Clifton, March 21, 1863.

At the same meeting, Dr. W. Budd exhibited two drawings which he had lately obtained from Vienna, of the disease of the intestinal follicles, which is characteristic of the Rinder-pest, or cattle-plague, and which present such a striking resemblance to that of typhoid fever in man. Dr. Budd has promised a report on this disease for the next annual meeting.

## ON INTUSSUSCEPTION.

By GEORGE HARE PHILIPSON, B.A., M.B. Cantab.  
M.R.C.P. Lond.; Physician to the Newcastle-upon-Tyne Dispensary and Fever Hospital; etc.

THIS lesion of the intestinal canal is one of the most formidable, generating obstruction. Its occurrence, in general, is very sudden. In the first few years of life, most frequently without any previous symptoms; but, in adults, more often preceded by some derangement of the bowels.

It is a malady fatal in the extreme. In the infant, highly so. The immediate effect of the alteration of natural position, one portion of intestine having passed within another, is a prostration of the vital powers. The shock is severe in character, and runs a swift course to death; the suffering being excessive, and frequently extended only over a few hours. The first risk having been passed, but without the restoration of the natural relation of the parts, for many days there is danger of no small amount. The contained portion of bowel, being constricted by the containing, becomes strangulated; and, by the process of sloughing, eliminated. Even if this period be got over, the recovery is uncertain, and may be of short duration. At the site of the cicatrix, a partial obstruction may be formed, liable at any time to be exaggerated.

This disease, happily, is not very common. At the General Dispensary, Newcastle-upon-Tyne, during ten years (1854—1863), where the annual admissions were 12,000 (4000 by letter, and 8000 without), only two cases of intussusception are recorded.

Of all the lesions, within the bowel itself, producing obstruction, those from intussusception are as numerous as all the others added together. Out of twenty-five cases of obstruction, fifteen arose from intussusception; while, in the remaining ten, some other cause was present. In three, the intestine was twisted upon its own axis; in one, the intestine was turned round a distant portion; in three, a stricture existed, twice from carcinoma of the rectum, and once from simple hypertrophy of the muscular structures of the sigmoid flexure of the colon; and in the remaining three, the obstruction had arisen from a mechanical impediment, in no way connected with the structures of the bowel, in two from a fecal impaction, and in one from a collection of cherry-stones.

No age is exempt from the occurrence. It is much more common in children than in adults, increasing rapidly in frequency as infancy is approached; the first few months of life contributing the largest number of cases. Even with the careful exclusion of those in which it was evident the inversion had occurred in the "agony". From an analysis of the

fifteen cases, there were seven under 1 year, five being under 4 months; three between 1 and 2 years; three between 2 and 12 years; and two above 12 years. There were five recoveries, all above 2 years old. Of the ten fatal, seven had not passed the first year of life.

The following case is an example of this condition in an exaggerated degree; the portion of bowel invaginated being unusually large; and ending in death by exhaustion in a very few hours.

A male infant, aged 10 months, at five o'clock in the morning of May 6th, 1864, aroused his parents by his violent crying. At 3 A.M., his bowels had been freely moved. At this time, he was suckled, fell into a sleep, and was returned to his cot. Some castor-oil was given; but the child continued to cry loudly, and appeared in such suffering, that at 9 A.M., their regular medical attendant, Mr. T. Y. Thompson, was summoned.

The child was then perspiring most profusely, crying out as if in great pain, vomiting continuously, and passing bloody mucus from the bowels. The rectum was found occupied by an obstructing body, situated about four inches from the anus. The nature of the case was fully recognised. After a failing attempt at reduction with the finger, insufflation of air and the injection of warm water were both employed, but with only temporary benefit.

At 5 P.M., I was requested in consultation. The following was the condition. The lips pale and blanched, surface cold and clammy, pulse scarcely perceptible, vomiting incessantly a clear, watery liquid; every few minutes repressing respiration, expiring deeply, and then suddenly crying out in a whine. In the interval, passing into a state of syncope. During each paroxysm, the abdominal muscles were forcibly contracted. The action was likened by my friend Mr. Thompson to the contractions aiding the uterine efforts during parturition. A distinct fulness was visible in the left side of the abdomen; and upon examination, a tumour was easily defined. Nearly pure blood was exuding from the bowel. Upon exploration of the rectum, the finger was at once arrested by a tumour, firm, round, smooth, without any indentation or opening. The finger was passed with ease between the tumour and the mucous surface of the rectum, without being obstructed by a second protrusion.

Upon gradual but with rather firm pressure, the tumour was reduced to the length of the finger. During the time, the urine was expelled in a full stream. After the finger was withdrawn, the protrusion became as low as before. A rectal bougie was afterwards carefully passed to its entire length, the abdomen being at the same time gently palpated. It was allowed to remain for more than ten minutes; but after its withdrawal, the tumour was again forced down. After a short interval, recourse was again had to the insufflation of air. This proceeding was maintained continuously for some time; but the abdomen was not perceptibly distended. The air nearly all the time escaped through the sphincter, even when it was firmly compressed round the tube. Warm water was again injected in a full and forcible stream; but this time quite as fruitless in the result, as at the first attempt eight hours previously. At each contraction, the tumour was felt to be firmly compressed, forced onwards, becoming visible at the anus, of a bright rose colour, receding in the interval. No further attempt was made at reduction. A little wine and water was ordered to be given from time to time, and two grains of Dover's powder every second hour.

At 7 A.M. the next morning, the child died, twenty-eight hours after the probable seizure. During the

last few hours of life, the vomited matter was stercoraceous.

SECTIO CADAVERIS, thirty hours after death. Incisions were made from the ensiform cartilage to the umbilicus, and from this point laterally to the centre of each Poupart's ligament. Upon reflecting the flaps, the small intestines were seen to occupy the right lumbar, umbilical, and hypogastric regions; while, in the left lumbar region, a dark mass was to a small extent visible. On drawing the small intestine over to the right side, the lump was found to consist of the sigmoid flexure and descending portions of the colon. It was of a dark colour, firm and unyielding to the touch, and securely fixed in position. The cæcum, ascending and transverse colon, were nowhere to be found; the right iliac, lumbar, hypochondriac, and umbilical regions, being void of any large intestine. The small was continuous with or rather passed into the large at the left hypochondrium, at which point a marked constriction existed. The cavity of the peritoneum contained fully six ounces of clear serosity; but no flakes of lymph. The peritoneum at various parts was very loosely connected with the abdominal wall. The small intestine was of a natural hue, adhesions existing at no part. The first portion was greatly distended with flatus and liquid; while the last part, for about three feet, was collapsed and empty. The intestine had become twisted upon itself, at the commencement of the collapsed portion. The large intestine was carefully removed in its entirety. The mass measured eight inches in length. Upon turning the rectum inside out, the tumour occupying its interior was of a dark purplish colour, nearly black, quite dull, firm, and round, without the least appearance of an opening. An attempt was made to effect the reduction, in a similar manner to that during life; but it was unsuccessful. Traction was then made upon the small intestine; and it was only dislodged after a considerable amount of force. Bloody liquid and a few flakes of lymph ran from the sheath. A few adhesions were present; but they were quite recent. The length of the small intestine inverted was three inches. The cæcum and appendix were then drawn out; but still more force was required; the adhesions were very firm. The ascending and transverse colon were withdrawn with ease, few adhesions being present. The portion of the inverted intestine situated lowest, nearest to the anus, was the very commencement of the colon. The head, or the lowest part of the tumour, was formed by that part closely adjoining the ileo-cæcal valve. The mesentery within the sheath was greatly congested, chiefly in patches. No extravasation was discernible. The serous layer of the cæcum, appendix, and the commencement of the ascending colon, was of a dark hue. The mucous membrane corresponding was deeply congested, nearly black. The lips of the ileo-cæcal valve were greatly congested, quite black, closely resembling a clot of blood. The opening between was perfectly closed. The intestine in its entire length was quite free from any scybalous matter or other obstructing body. The sheath, consisting of the rectum, sigmoid flexure, and descending colon, therefore contained the transverse and ascending colon, the cæcum, and appendix, with a portion of the great omentum and meso-colon, and three inches of the ileum, with the corresponding mesentery.

This case is one of no small interest. The nature of the disorder was recognised early. The indications were clear and unmistakable. The age of the little sufferer, the extreme suddenness of the attack, the evident suffering, the violent shock to the vital powers, the existence of a tumour in the abdomen, visible to the eye, and with more certainty deter-



mined by the hand, the unceasing vomiting, and the passage of a bloody mucus from the bowel, together pointed to the occurrence of intussusception. The exploration of the rectum, when the tumour occupying its interior was discovered, left no doubt.

The amount of intestine displaced was unusually large. The invagination, consisting of the three lowest inches of the ileum, the cæcum, and appendix, with the ascending and transverse colon. In the other nine fatal cases, the inversion was, in no instance, to the same extent. The invagination consisted of—the ileum into ascending colon, 3; ileum into transverse colon, 1; ileum, cæcum, and ascending colon, into transverse colon, 3; cæcum and ascending colon into transverse colon, 1; transverse into descending colon, 1; or 4 examples, where a portion of the small intestine alone was inverted; 3 of portions of the small and large together; and 2 of a portion of the large alone.

The sequence of events at the time of, and subsequent to, the occurrence, was probably the following. At the time of the action of the bowels, said to have been both violent and sudden, some irregularity of the intestinal contractions followed; the consequence being that the termination of the ileum passed within the colon, carrying with it the cæcum and appendix. The effect of drawing the breast, in all probability, increased the displacement. The ileum then, acting as a mechanical obstruction, would soon rouse the peristaltic action. These contractions to overcome the obstruction, aided by the diaphragm and the muscles of the abdominal parietes, instead of lessening, would only increase the derangement. There being no hindrance to this, from the peritoneal folds being unusually lax and free, not fixing the intestine in position. Thus, a predisposition to the affection would exist, the chief cause of its greater frequency in children over adults. At each subsequent contraction, the inverted portion would be forced onwards, nearer the outlet, dragging after it the successive portions of the colon.

Any treatment, to be efficacious, must be manipulative rather than remedial. Aperients are, with certainty, contraindicated; every movement and muscular contraction increasing the displacement, and only adding to the danger. Castor-oil, so useful a remedy in the various disorders of early childhood, and so frequently administered by the anxious parent, must often establish, if it do not increase the malady. In every case, the rectum should be explored. If a tumour be present, its reduction should be attempted at once, by the finger or the rectal bougie, aided by the gentle palpation of the abdomen. If no tumour be discovered, or if by these manipulative efforts its reduction cannot be effected, insufflation of air and the injection of warm water may be successively employed. The former may be safely accomplished by an ordinary pair of bellows. To be serviceable, either proceeding must be employed early. The adhesions are quickly formed. In the autopsy related, in less than thirty hours after death, when decomposition was advanced, a considerable amount of force was required to withdraw the inverted intestine.

The question of opening the cavity of the peritoneum, and then attempting the reduction by drawing upon the uppermost portion of the invagination, forces itself forward for consideration. The most eminent surgeons of the day neither advise nor perform this operation themselves. There is no case recorded of obstruction from intussusception, in which the operation has been followed by a successful result. These are not satisfactory data to rest this question upon. With the difficulties consequent upon the operation superadded, it may be fairly considered untenable.

In those cases, in which a tumour is present in the rectum, if the sufferer survive the first few days, it may be proper to puncture the protrusion by means of a trochar. The distension will thus be relieved; and a way will be formed for the exit of the contents of the bowel, especially the gaseous, a fertile source of irritation. In the early period, no good can, with any possibility, accrue from this proceeding.

If a fair attempt has been made at reduction, manipulative efforts must be suspended for the administration of narcotics and sustaining food; trusting that, by these means, time may be obtained for the operation of Nature's curative efforts. In which process, the portion of damaged bowel is discharged, and the canal rendered pervious, and capable of performing its allotted functions. The remedy of all others most fitting, and from which the best results are obtained, is opium. To be of any service, it must be given in full doses, and repeated at short intervals. From a certain power it exercises over the circulation, the inflammatory action becomes less. In addition, from its sedative action on the nervous system, the irritability of the intestinal canal is allayed, the expulsive efforts of the abdominal muscles becoming less forcible, and occurring at notably longer intervals. Last, but not least, by the aid of a drug, that has been called "the gift of God" to man, one of the greatest aims of any treatment is accomplished, the assuaging of pain.

## Original Communications.

### INFRAMAMMARY PAIN.

By THOMAS INMAN, M.D., Liverpool.

DR. MARTYN considers that some cardiac distress may be the cause of inframammary pain; but we can scarcely agree with the conclusion, when we consider that the pain in question is absent in endocarditis, pericarditis, valvular disease, and in all other cases where the heart is organically changed.

In any inquiry upon the signification of a symptom, we should, I think, try to discover its analogies, its concomitants, and its relations. If we treat inframammary pain in this way, we shall find that it has no analogy with common tic. I have had under my care a man who, from the extension of an aneurism affecting some of the dorsal nerves as they emerged from the spinal canal, had a pain about and below the nipple, from true nervous irritation; and that pain had no resemblance to that spoken of by females and others. The pain is analogous to that complained of over the spinous process of the seventh cervical vertebra after a very long walk, with a heavy coat on one's back. It resembles the pain felt at the insertion of the biceps humeri after carrying a heavy gun all day; it is similar to that felt at the insertion of trapezius, in the shoulder, by so many consumptives; it is described in the same terms as the pain in the back in gibbous spine; and a similar symptom is occasionally met with in gouty subjects in the knee, in the heel, in the pubes, and elsewhere; and I have known a similar pain in the plantar fascia of delicate housemaids, from long standing, etc. The pain is associated with delicacy of constitution, and with work disproportioned to strength. With it come pains in other parts, showing muscular weakness; loss of appetite and digestive power, showing stomachic feebleness; flatulence, borborygmi, irregularity of bowels, showing a want of "tone" in the intestines. There is something wrong in females with the uterine functions. In all, there is a weak

heart and respiratory muscles, as shown by palliation on movement, sluggish action during repose, and frequent sighing. The nervous system is generally unusually irritable, and the "spirits" are either low or variable.

The pain is related closely to movement. Absent in the morning, it increases in severity as the day wears on, and reaches its acme at night. It is invariably relieved by perfect rest. The spot most commonly affected can readily be seen in athletes who are exhibiting feats of strength; it is the sole point in which no movement of the skin takes place; viz., where the integument is tied down to bone, and is more or less stretched at every movement of the trunk. The left side is more commonly affected than the right, because it is weaker. The pain is occasionally persistent in pregnant women after the fifth month, and seems to be due to stretching of the skin.

I conclude, therefore, that inframammary pain is due to movement disproportioned to strength. We may call it myalgia, neuralgia, or any other algia that we like, without harm, so long as the name involves no wrong system of therapeutics. As the symptom is due to movement, the relief must be sought in repose; and counter-irritants, anodynes, etc., are rarely of service, except in so far as they compel quiescence. Strapping with a sufficient number of strips to insure immobility of the side is an instant cure. But, as few persons like to go about thus crippled, a more satisfactory method of treatment is solicited. This is to be sought by endeavouring first to save the patient's strength, and secondly to increase it. In carrying out the details, each practitioner can adopt the plan he likes best; but of one point he may be assured—viz., that, as a general rule in these cases, air without exercise is better than air and exercise. Even in Dr. Fuller's case, the cure was not effected without "bodily repose", though the air and exercise he took increased his health.

## CONTRIBUTIONS TO DENTAL SURGERY.

By SAMUEL ADAMS PARKER, Esq., Licentiate in Dental Surgery of the Royal College of Surgeons of England; Surgeon-Dentist to the Queen's Hospital, and Senior Surgeon-Dentist to the Birmingham Dental Dispensary.

**CASE I. Facial Neuralgia of Twelve Years' Standing, Cured by the Removal of Diseased Teeth.** J. Johnstone, aged 43, was admitted to the Dental Dispensary in February 1863, suffering from a violent attack of facial neuralgia, which had existed for a space of twelve years with greater or less severity.

During the last three months previous to my seeing him, the pain, which had been of an acute character, had come on regularly in the evening, and had increased in severity till nearly midnight; when it had gradually subsided into a dull heavy pain, continuing uninterruptedly till the following evening, when the same thing was repeated; and this without variation night after night. The patient also complained of a burning pain on the top of the head, and of a little intermittent pain in the ears. Previously to the occurrence of the neuralgic pains with such severity, the patient had suffered much from his teeth; but, as in numerous cases which I have already published, the pains in the teeth had subsided before those of a neuralgic character supervened. The patient attributed his sufferings not to his teeth, but to tic douloureux.

I examined his mouth, and found the teeth for the most part sound, of a slight yellow colour, indicative of strength, and non-liability to decay like those of a

pearly white character. However, the stumps of the first and second superior left bicuspid and the second inferior right molar were remaining in the jaw; and the inferior right dens sapientia was much decayed. On the sixth day of February 1863, I removed all the stumps above mentioned. On the 10th, the patient was somewhat better, but still experienced much pain. I then removed the dens sapientia.

The patient saw me on the 18th, and informed me that he had been perfectly free from pain since the last operation; and I know he has continued so up to the present time.

**CASE II. Facial Neuralgia Cured by the Removal of Diseased Stumps.** November 6th, 1863. J. Wood, aged 49, had been suffering a long time from neuralgic pains in the head, which had visited him in such violent paroxysms that he became for a time perfectly giddy, and his vision was somewhat impaired thereby.

He had been in this state three years, during which time he had been under medical treatment, and had taken a variety of medicine without much benefit, and had been ultimately consoled by the information that the pain would continue for the remainder of his life. This patient always had an idea that the pains started from the lower jaw, where two or three old stumps were; but the mouth had never been examined.

From the condition and appearance of the stumps, I was induced to believe that much benefit, if not an ultimate cure, might be effected by their removal; to which the patient readily consented. I removed four stumps, which were all that remained in the lower jaw; the other teeth being in a tolerably good condition.

I saw him three times after the removal of the stumps, and found that the pain had gradually subsided, and had finally left him.

**CASE III. Morbid Growth of the Gums Caused by Diseased Stumps: Removal of the Stumps, and Ultimate Cure.** Mr. B., aged 30, consulted me in July 1863, respecting his gums and palate, which had been in an inflamed and otherwise diseased condition for four months.

I found upon examination, that the gums were very thick and spongy; that they bled profusely upon the slightest touch, and discharged a thin matter from their margins, which rendered his breath very offensive. This condition of things had extended to the palate and throat, and had rendered them very much inflamed. In the centre of the palate was an abscess, which, when opened, discharged a quantity of thick pus. The patient had lost the crowns of nearly every tooth; the stumps were for the most part loose, and on that account had been a cause of great irritation, and had rendered the patient's condition daily worse.

I removed four or five (as many as he was able to bear at one time) stumps and freely scarified the gums, more particularly between the teeth; and ordered a wash for the mouth composed of

Tinct. myrrha ʒiv; infusi rose comp. ʒviii; acidi nitrici diluti mxx.

To be used three times a day.

This wash I invariably order in cases where the gums are at all inflamed and spongy, and always have found that patients have derived great benefit from it. I also ordered him to take a small quantity of lime-juice internally every day, and to be careful as to his diet.

I saw the patient a few days after the operation, and found that a more rapid improvement had taken place than I had anticipated. The palate and throat were free from all inflammation, and the abscess was fast closing up. The gums, although not by any means well, had an improved condition about them



which gave promise of an early cure. On the occasion of this visit, I removed the remainder of the stumps, and ordered him to continue the wash and lime-juice.

At the expiration of a fortnight, I again saw the patient, and during the intervening time, he had been getting gradually better, and the mouth, in which, however, very few teeth remained, was cured.

**CASE IV.** *Strabismus Caused by a Decayed and Aching Temporary Lower Molar: Removal of the Tooth: Instantaneous Cure of the Disease.* This may, at first sight, seem a strange case. It is the first of its kind that has ever come under my notice, and was remarkable in two respects; first, for its sudden appearance; and secondly, for its sudden disappearance. The case may be related in a very few words.

A child, four and a half years old, came under my care at the Queen's Hospital. She was brought by her mother, who stated that, seven days previous to my seeing her, she was attacked with a violent pain in the first inferior temporary molar, and at the same time the left eye completely turned and became fixed. The tooth was not aching at the time I saw her, but it was very much decayed, and I extracted it. In twenty-four hours after the operation the eye began to turn, and in three days it was perfectly straight.

In this case, there could be no question as to the cause of the strabismus, and none as to the remedy and cure.

**CASE V.** *Lesion Produced by a Coming Wisdom Tooth.* Georgina Maynard, aged 29, was admitted an out-patient at the Queen's Hospital, October 7th, 1863, under the care of Mr. Gamgee, suffering from a large, hard, and extremely painful swelling on the whole of the right side of the face, more particularly over the upper molar teeth. She stated she first felt pain six months previously, when she noticed a swelling. She did not do anything for it till some seven weeks previously to coming to the hospital, when, on account of the great pain she experienced, she fomented the parts daily with poppy heads. Mr. Gamgee ordered a linseed meal poultice to the swelling, and a mixture of acid and bark to be taken internally.

October 14th. At this time, in consequence of the size, stiffness, and extreme tenderness of the swelling, she was unable to open her mouth. The medicine was continued, and an embrocation of two drachms of tincture of hyoscyamus and six drachms of oil of almonds ordered to be applied over the swelling.

October 17th. The poultice was repeated, and she was ordered to see the surgeon-dentist.

October 29th. This was the first time I saw the patient; and, finding that she could open the mouth but very little, I ordered a fomentation of poppy-heads to be used as hot as she could bear it inside the mouth.

November 1st. An abscess had burst in the mouth since using the fomentation, and she could open her mouth very much better. The poppy-head fomentation and mixture were continued.

November 9th. The swelling had been considerably diminished. She could open her mouth almost without pain, though she still suffered much pain at the back of the jaw. I now carefully examined the mouth, and found that the whole of the mischief was caused by a coming wisdom tooth. The gum over the tooth I freely lanced by making a crucial incision.

November 16th. The wisdom tooth had made great progress; the swelling was entirely gone down, and the pain gradually subsiding. The tonic mixture was continued.

November 23rd. She was discharged cured. The wisdom tooth was nearly through the gum.

**REMARKS.** This is the fourth time I have contributed cases of dental interest to the medical journals; and in doing so, I have selected those cases from my

note-book, which are of importance, rather, perhaps, to the medical than to the dental profession, on account of their coming under the notice and treatment of the former class, before they are seen by the latter.

I have endeavoured from time to time, to point out and impress upon my readers, the great importance of the mouth being at all times carefully examined by the medical practitioner, whenever cases may come under their observations, of facial neuralgia, and tic douloureux, for it very rarely occurs that the teeth have not played some prominent part in bringing on the mischief.

For instance, in case No. 1, the disease had extended over twelve years, without any examination having ever been made of the teeth; and in case No. 2, it was the patient's own opinion, that prompted him to seek advice, after he had been informed that he should never be well again.

In most of the cases I have published, it will be seen that the pains alluded to are confined to one or two particular spots, either in the temples, over the orbit, in the ears, or along the lower jaw; sometimes the pain extends down the neck to the shoulders.

It is sometimes very difficult, without a considerable amount of experience, for the dentist to distinguish, or rather to diagnose, the particular tooth or teeth that may be the primary cause of the mischief; for, as I have stated before, when the pain becomes seated in any of the parts above mentioned, little or no toothache proper is experienced; hence the unwillingness of the patient to have any operations performed upon the teeth.

The pain arising from toothache is nearly always centered in and around the diseased organ; while neuralgic pains, arising from the same cause—viz., diseased teeth or stumps—are situated at some distant part.

We find occasionally, not frequently, upon examining the mouth carefully for some exciting cause, that every tooth appears perfectly sound, though still some diseased condition may be lurking in one or more of them, which may be generally discovered, by gently tapping each tooth with an instrument, or, as Professor Tames suggests, by throwing a jet of cold water from a syringe upon them.

When the pain appears to arise from a sound tooth (there being no diseased ones in the jaw), every means should be adopted by the medical practitioner previous to extraction—aperients, tonics, and local depletion being especially valuable.

As regards the injury done to the general system by a diseased condition of the mouth, a few remarks will not be out of place. Proofs without number have been given, that a diseased or abnormal condition of the teeth may very seriously, and indeed sometimes fatally, affect the general health of the sufferer therefrom; and it must be no less evident to unprofessional than to professional observers, that ill health is the frequent cause of bad teeth. One would have thought, as in this case, a reciprocal action is so plainly evident, that it would naturally be made the basis for the exertions of both medical and dental efforts, to restore the general health to its normal natural tone.

There is, however, another consideration which may serve to put the danger of diseased teeth affecting the general health in a yet stronger light. Their important connection with the organs of digestion, by whose abnormal condition the whole body becomes weak and disordered, is surely enough to suggest that by attention to those teeth the very fountain-head of the malady may be reached, and its further progress arrested.

It is well known that even sound teeth in every stage of their development have been the cause of

serious and at times of fatal mischief. They have been the cause of infantile convulsions and consequent death; and surely in a diseased condition they may naturally be expected to interfere with the health of the adult, who is arrived at that period of life at which he is more at the mercy of their mischievous tendencies, though in his case the evil may proceed in a subtler form, and with a slower pace.

### SOME ACCOUNT OF THE OPERATIONS PRACTISED IN THE NINETEENTH CENTURY FOR THE RELIEF OF TENSION OF THE EYEBALL, GLAUCOMA, ETC.

By JAMES VOSE SOLOMON, F.R.C.S., Surgeon to the Birmingham and Midland Eye Hospital.

[Concluded from page 92 of last volume.]

*Diseased States in which the operation has proved Useful.* On March 1st, 1860, I operated upon a much disorganised and tense eye; and on the 31st, upon a case of near-sightedness (myopia), complicated by choroido-retinitis. The pupillary margin of the iris "was drawn slightly towards the lens, the other part of the membrane being arched forwards, except at its ciliary origin."

The effect upon the accommodation of the eye and congestive symptoms proved so remarkable, that I was encouraged to submit other myopic patients to a similar plan, and obtained markedly beneficial results.

The theory of treatment in this class of cases was based upon the opinion, at the time generally prevalent in England, and taught in the best text-books of physiology; namely, that the ciliary muscle consisted of a single set of fibres, which in direction were radial, and that the adjustment of the eye to near objects was effected by contraction of the muscle drawing the lens towards the cornea.

I argued thus: if I cut some of these fibres across, the muscle of the lens will be weakened, and the far point for reading will undergo an increase.

As my views upon this subject, with clinical illustrations, have been already given in the *Medical Times and Gazette* (vol. 1861-62), and will shortly appear in a separate form, it is unnecessary here to do more than notice that, in cases which I have had opportunity of following since the year 1860, the increase of accommodation for large and distant objects, as human features and landscape, has been most completely maintained\*; while a very slight contraction has taken place in the reading distance.

In other words, the myopia, as regards distance, has been permanently improved and *arrested*; a slight progress only having occurred in respect to near objects.†

Another point of interest was presented in two cases of extreme myopia, who, having been much improved by the operation, resumed, after a time, the use of their deep concave spectacles for looking at near and far objects. In each instance, the near-sightedness returned to what it was before surgical treatment.

Do not these facts obtain interest from their relation to the mechanism which accommodates the eye to different distances? Are they not suggestive of the existence of some active agency by which the organ is adjusted for objects placed beyond twenty

feet? The time, we would fain believe, is not remote, when a solution of some of the several problems connected with the subject of optical accommodation and refraction will be attempted by a recourse to intraocular myotomy in suitable cases.

A word of caution on the selection of cases. Instances of hypermetropia and astigmatism, diseases which are sometimes relieved by concave glasses, and which might, on cursory examination, be confounded with near-sightedness, must be carefully excluded from operation.

To proceed with the narrative. In the same year and month, I operated upon a case of *acute* choroiditis, complicated by great tension and myosis. The first two conditions were reduced by the treatment, and vision restored; and I would here repeat the opinion expressed at the meeting of the British Medical Association in London (1862); namely, that I am unacquainted with any "surgical measure, equally safe and easy of execution, which exerts the same amount of curative power in cases of subacute and chronic choroiditis," as intraocular myotomy.

In April 1860, I treated instances of glaucoma, with very satisfactory results. In the glaucomoid tension well known to practical ophthalmic surgeons, as occasionally following the operation of cataract extraction, where vitreous, even though small in quantity, has been lost, and the iris obliterated from view at the centre of the cicatrix, the operation under consideration removes the tension and restores clear vision. In one case, the tension was not completely overcome until after the incision was repeated, and slightly extended in length.

Previous to adopting this method, I made trial of division of the ciliary structures at a right angle with the cornea, selecting the point where they were continuous with the coloboma. In none, were the symptoms ameliorated; in two, so much aggravated as to suggest the expediency of an immediate enucleation of the globe.

I recommend that the intraocular myotomy should always include the base or pillars of the widest part of the iris. Mr. Teale (*BRITISH MEDICAL JOURNAL*, April 9th, 1864, page 404) appears to have practised, at the suggestion of Mr. Bowman, a somewhat similar, if not an identical, plan of treatment, in two cases in which exalted tension was consequent upon a needle operation for cataract. The first of Mr. Teale's cases occurred nearly a year after my papers had appeared in the *Medical Times and Gazette*.

In the glaucomoid state, which sometimes forms a sequela of violent injury to the eyeball, when complicated by dislocation of the lens deeply into the vitreous, no surgical treatment can be relied on as curative of the tension and prophylactic of the occurrence of sympathetic ophthalmia.

Discouraged by the results which I had witnessed in my own practice and that of others, I withheld all surgical interference in the last case that came under my care. The irritation subsided, and no serious sympathetic mischief followed in the fellow organ. The patient was nearly 60 years of age.

In May 1860, the operation—by removing tension from an eye in which the pupil was closed and the iris bossulated (synechia annularis)—cured a sympathetic irritation of the fellow organ, that had existed a year, and which, at the time of treatment, rendered the reading of small type impossible. (*Vide Medical Times and Gazette*, vol. 1861, p. 327.)

The case derived additional interest from showing that the irritation due to an exalted intraocular tension may be imparted to a sound eye.\*

\* Many writers consider the eye to be passive when viewing landscape, and that accommodation or adjustment only comes into play when near objects are viewed. They therefore object to speak of accommodation in distance.

† According to Donders, the natural tendency of myopia is to advance.

\* This fact is, I believe, now (September 1864) conceded, *quoad* glaucoma, by the iridectomy school.



In the next year (1861), instances of conical cornea were submitted to treatment. The sides of the cone became more flat; when opacities were present, they underwent rapid absorption, and if superficial, disappeared. The vision was much improved. These results appear to point to an improved nutrition of the cornea, and a diminution of the secretion of aqueous humour, which, it will be remembered, is derived from the surface of the iris and tips of the ciliary processes—parts that are immediately implicated by the operation.

In regard to the treatment of nearsightedness by the procedure under discussion, I cannot, Mr. President, close this paper, without referring to a claim of priority, which was put forth in a letter in the *Lancet* (vol. II, 1862, Sept.), upwards of two years after the journals and retrospects had given publicity to my method of treating myopia.

In this letter, it is asserted: 1. That I wrote to Mr. Hancock a few days after the publication of his paper on Division of the Ciliary Muscle in Glaucoma, in the *Lancet* of Feb. 11th, 1860, inquiring whether he had any new facts to communicate. 2. That Mr. Hancock and his colleague Mr. Power wrote to me in reply; and that very soon afterwards I visited the Westminster Ophthalmic Hospital, and had explained to me the application of division of the ciliary muscle to cases of myopia. 3. That, on my return to Birmingham, I prepared the notices of my cases of myopia which appeared in the *BRITISH MEDICAL JOURNAL* and *Medical Times and Gazette*, of the respective dates of May 26th and June 1st, 1860.

Very fortunately, the letters to which reference is here made are in my possession; and I need feel no delicacy, Mr. President, in placing these letters in your hands.

You will observe, sir, that Mr. Hancock's letter is dated May 17th, 1860, is written in answer to one from me, and concludes with a request that I would publish my cases.

The letter of Mr. Henry Power is dated, as you see, May 18th; and contains a full description of the operation of division of the ciliary muscle, and a drawing of conical cornea, showing the direction which the knife should take.

Here, then, are the letters which the writer in the *Lancet* asserts were written in February, and interchanged previously to my visit, "*shortly afterwards*", to the Westminster Ophthalmic Hospital; which visit was followed, he says, by an announcement, in the *BRITISH MEDICAL JOURNAL*, of my cases of nearsightedness treated by intraocular myotomy. I hand you that *JOURNAL*; it bears the date of May 26th; just one week later than the letter of Mr. Power, and eight days later than that of Mr. Hancock. In the next week, June 1st, the *Medical Times and Gazette* drew attention to the same subject; and on that day I visited the Westminster Ophthalmic Hospital, and not before since 1850.

If reference be made to the cases published by me in the last mentioned periodical (vol. 1861, January), it will be found they were operated upon in March, April, and May, 1860; therefore, in order to give a colour of probability to Mr. Hancock's claim of priority, it became absolutely necessary to place back the date of that gentleman's letter, and his colleague Mr. Power's, to about February 14th; and my visit to their institution to early in March or the end of February. It was also essential that the date of my letter should be omitted.

The evidence in refutation of the statements to which allusion has been made, admits of being carried much further. It will suffice, however, to refer to the *Lancet* for an announcement that succinctly and conclusively decides my claim to priority of

operation in cases of myopia. The *Lancet* for July 7th, 1860, p. 7 (six weeks after the note of my operation in the *BRITISH MEDICAL JOURNAL*), contains the following paragraph.

"The cases in which division of the ciliary muscle has been resorted to are, hydrophthalmia, sclerotic staphyloma, and acute and chronic glaucoma. It has also been performed in conical cornea by Mr. Power."

The same periodical furnishes a conclusion so appropriate to the present paper that I cannot refrain from making use of it.

"We wish it to be understood that any new operation, with whatever authority it may be introduced, or with whatever amount of success it may meet in the hands of its originator, offers a fair subject for just and even rigid criticism; but this criticism, if it is to be of service [to medical science?], must be conducted in a spirit of equity."

## PARAPHIMOSIS.

By JOHN THOMPSON, M.D., F.R.C.S., Bideford.

AMONG the minor cases of surgery that frequently come under the treatment of the surgeon, is paraphimosis. As observed in the wards of the hospital, it will be generally in connexion with venereal disease; but in private practice, it occurs mostly without this complication.

It is met with in two principal forms: the first, when a natural phimosis is converted into a paraphimosis, by the forcible retraction of the prepuce behind the glans; the second, from great swelling of the glans and prepuce, making it impossible for the patient to bring the prepuce forward, when it has by accident or design been drawn behind the corona. In the latter case, the swelling of the glans and prepuce causes the paraphimosis; in the former, the paraphimosis causes the swelling.

A moderately tight constriction where disease exists on the glans will quickly produce tumefaction, discoloration, ulceration, and even sloughing; whereas, when disease is absent, the results are not so severe, and consist of swelling of the organ, followed by inflammation, with perhaps ulceration at the seat of stricture, and also adhesions among the surrounding integuments.

As regards the treatment, it is advised by all to relieve the constriction, by reducing it with the hands as quickly as possible, more especially where venereal disease is present, as any impediment to the circulation fearfully promotes the ravages of ulceration and slough. But, supposing efforts with the hands fail to reduce it, a good deal of variation exists among the directions given by writers on practical surgery. Thus, scarifications, elevation of the penis against the abdomen, and confinement in this position for some time, the use of saturnine lotions, division of the stricture at once, have their several advocates.

The late Mr. Samuel Cooper advised the copious affusion of cold water to the organ, and then trial of reduction by the hand. He stated that this method had in his experience been most successful, and that division of the stricture would not often be necessary, were it more generally adopted.

The main object of my communication is to state that I most fully concur in the justness of Mr. Cooper's views, from their practical value tested by experience. In the course of my practice, I have met with a good many instances of paraphimosis, and have never failed at reduction, provided persistent adhesions had not formed. Merely moistening the parts is not sufficient; a pauc must be placed beneath

the genitals, and cold water must be poured on them for a quarter of an hour or more; and such diminution in size will result as to allow of reduction with comparative facility. Of course, were the organ in such a state of disease as to threaten sloughing, the cold affusion might be injudicious; but common sense would direct in exceptional cases.

Mr. Cooper remarks, in his *Surgical Dictionary*, "that Mr. Dunn, of Scarborough, had reminded him that, in a former edition, he had omitted to speak of the power of the cold affusion in promoting the reduction of the glans." I regret to observe the same omission in many modern Systems of Surgery; for I am convinced that, next to division of the stricture, it is the most powerful aid to reduction.

Cases will undoubtedly occur where attempts at reduction will fail, even with the aid of cold affusion; but they are almost invariably those where the disease has existed for a long time, and rigid adhesions have formed. In such cases, reduction cannot be effected, even by division of the stricture. The most that will result will be a loosening of the integuments where the division is made. This I have noticed in several cases.

A lad was some time since brought to me with severe paraphimosis, which had existed nearly a week. It was caused by his forcibly retracting a phimosis. I was unable to reduce it by simple pressure; but on using for some time the cold douche, next drawing the integuments of the penis well up towards the pubes, so as to break up newly formed adhesions, then placing my thumbs on the glans and my fingers on the integuments, I succeeded, after some steady manipulations, in completely relieving the strangulation.

A man, the subject of balanitis, drew his prepucce behind the glans, and could not afterwards draw it forward. He remained in this state, fearfully swollen, for four days, and then applied to me. I thought that, in this case, I must divide the stricture; and I accordingly took a knife into the room, intending, if my ordinary plan did not succeed, immediately to operate; but, on using the cold douche for some time, I was enabled completely to relieve the strangulation.

I might add a number of similar cases, but it would draw my communication to too great a length. I trust, however, I have said enough to induce some to try the effect of the cold affusion, before they resort to the knife.

**NON-COMBATANTS AGAIN.** Colonel Green, in his dispatch from New Zealand, thus speaks of the doings of the non-combatants in the last fight with the Maories. "Surgeon-Major Best, 68th Light Infantry, principal medical officer, performed his duty assiduously under fire, paying the greatest attention and care to the wounded. I can say the same of Assistant-Surgeons Henry, 43rd; Applin, 68th; and O'Connell, Staff: the former was particularly brought to my notice by Major Synge, commanding 43rd Light Infantry."

**THE DOCTOR AND THE ARTISAN.** "Talk," said the late Sir James Graham, "of the dependency of the skilled artisan, with more work than he can do, and a choice of employers at 30s. per week! Compared with the struggling tradesman, the young surgeon, the clerk at £100 a year, or the decayed merchant, whose trembling hold on the position of a gentleman in his native town depends upon the humour of his banker, he is both positively and relatively far better able to repel dictation, or to resist menace." And yet it is to this skilled artisan that the young surgeon is called upon to give his gratuitous medical services!

## Transactions of Branches.

### BENGAL BRANCH.

#### A CASE OF PHLEGMASIA DOLENS.

By S. GOODEVE CHUCKERBUTTY, M.D.

Mrs. S. C., aged 24, residing in a damp, low-roomed house, surrounded by bad drains and abominations of all kinds, was confined of her fourth child, at the full term, on August 23rd, 1863. The smell of the locality was so very offensive, that it was impossible for a stranger to visit there without feeling sick; indeed, I was forced to speak to the proper authorities on this subject, on my own account as well as for the benefit of my patient. Another circumstance which struck me in this case, was the great size of the womb during gestation; almost double of what it was on any former occasion; and she herself told me that the feet were slightly oedematous. The delivery was attended with an enormous loss of liquor amnii, and followed by much hæmorrhage.

On the third day after child-birth, I was hurriedly sent for to see her, as she was seized with fever. There was then some heat of skin; and increased frequency of the pulse. The complexion was darker than natural; the secretion of milk was deficient; and the breasts were neither swollen nor hard—a circumstance which seemed to puzzle her to account for, as she had always herself nursed her infants before. The fever assumed an intermittent character; but was soon cured by castor-oil and a few large doses of quinine. She continued, however, very weak, from the loss of blood she had suffered, and from the lochial discharge, which was very free and sanguineous till the ninth day, but then suddenly stopped. Her arrest was followed by a severe pain in the right iliac region; the left being perfectly free from suffering of any kind, even on the firmest pressure with the hand.

About this time, too, a pustular eruption broke out on her elder children; and large blisters formed on various parts of the youngest infant, becoming rapidly converted into large confluent sores, especially on the neck and flexures of the thighs, and finally proving fatal.

Whether to conceal her own sufferings in consequence of these fresh troubles, or really from a sense of benefit, after syringing the vagina with warm water and the application of a few hot bran poultices to the seat of pain, the lady soon declared that she was well. The next day, without asking my permission, she had a bath, according to her former practice, and washed her infant herself, suspecting that the nurse did not do her duty properly to the child, and that that was the cause of the sores. Two days after this, she attended the funeral of that child; and stood upon the wet grass during the burial service. For the next day or two, her grief was too fresh to permit her to notice her own condition. She then found that any attempt to stir about the house seemed to give pain in the right iliac region. The milk dried up without any accident. But now she felt feverish, and the pain extended down to Poupert's ligament. It also turned out that she had had all along a fetid discharge from the womb ever since the first attack of pain, which she did not like to mention before. She was ordered to keep her bed, and to apply bran fomentations to the seat of pain. Purgatives, quinine, warm ablution of the vagina, and generous diet, were at the same time prescribed. As soon, however, as she had derived some benefit,



and before she was quite well, she began again to walk about without telling me of it, though the effort gave her much pain.

On September 14th (twenty-one days after parturition), I found the whole of the right lower extremity, from the hip to the foot, immensely swollen and painful, though still soft and fully extended. There was, however, no pitting on pressure. She was now completely restless, and unable to rise from the recumbent posture; had no appetite, but a bitter taste in the mouth; and her complexion generally was of a darker hue. On a closer examination, the lymphatic glands of the groin and the upper part of the thigh were found to be greatly enlarged and tender; there being a string of them along the lower border of Poupert's ligaments, another cluster over the cribriform fascia, and a third group of two or three in the crural arch pressing on the femoral vein. The cords uniting these glands were, also, in some places, thickened and painful; but the most careful scrutiny failed to discover any pain whatever in any of the principal veins. The right iliac region was still somewhat tender, and presented to the fingers a knotty feel. The opposite limb, as well as the rest of the body, was quite healthy and free from pain. She had fever and constipation.

In this condition, I prescribed for her an immediate purgative of castor oil; to be followed by a mixture (consisting of quinine, chlorate of potash, tincture of the sesquichloride of iron, spirit of nitric ether, and water) thrice a day, local fomentation, anodyne friction, flannel bandage, perfect rest, and generous diet. This procured her some quiet; but the next day, the swelling had increased, and was getting harder; the pain was yet more agonising; and the patient deeply alarmed about her life.

Matters being still worse in the evening, a dozen leeches were applied to the affected glands, and the bleeding was encouraged by warm water fomentation. The relief from this treatment was most marked; and she slept soundly that night for the first time since her illness. The following day, she had no fever; her complexion was lighter; and, though the swelling was still undiminished, the pain was so much less, that she could allow the limb to be freely handled. Six more leeches were ordered to be applied to the remaining glands; and the morning afterwards, a further improvement was observed, the appetite having returned, and the glands at the groin being now no larger than mustard-seeds.

No further leeches were ordered this day; but the next, there being more pain and swelling of the leg, and an enlarged gland being discovered between the divisions of the gastrocnemius, four more leeches were applied to the latter with great benefit.

From this time forward, nothing beyond continuing the above measures, as to medicine, diet, and regimen, was done; and she went on progressing steadily, with the exception of only a single attack of fever brought on by having too soon imprudently left off the mixture for a day. On October 1st, her complexion was perfectly natural, appetite good, sleep sound, bowels regular, and the affected limb now nearly free from swelling, and only slightly painful in a small vessel about an inch and a half in length, crossing obliquely the middle of the thigh. This pain she felt while trying to stand on her bed, with the help of the tester-frame and bedposts. The purulent discharge from the womb still continued; but it was not so offensive as before.

On October 6th, there was no pain, and hardly any swelling of the limb, though it was still very weak. Her health was much improved; and she could now stand and move a few steps by holding the tester-frame of her bed. The vaginal discharge had much

decreased; and she was anxious to know when she would be allowed to go into the next room.

About the beginning of November, she was quite well; though the right foot was still apt to feel heavy and swollen on standing for a long time. On Christmas Day, she was as well as ever in her life.

In reading through the above narrative, the principal facts which strike the mind are as follows.

1. The highly insanitary condition of the locality where the case occurred, as shown by its bad conservancy and drainage, offensive odour, and the presence of sickness among other inmates of the house.
2. Dropsy of the amnion during gestation.
3. Excessive loss of blood during and after parturition.
4. Development of intermittent fever from the third day, unattended with mammary fulness.
5. Arrest of the lochia on the ninth day, followed by severe right iliac pain and the establishment of an offensive vaginal discharge.
6. Increase and extension of that pain downwards to the groin, and return of fever, following imprudent exposure to cold and damp at the burial of her child.
7. Speedy drying up of the lacteal secretion on the death of her infant.
8. Swelling and tenderness of the lymphatic glands and vessels, and of the whole length of the right lower extremity, without oedema, phlebitis, or tendency to flexion, twenty-one days after parturition.
9. Cure by rest in the recumbent posture, fomentation, leeches, constitutional remedies, and generous diet.
10. The prolonged convalescence and debility of the limb attacked.

A SINGULAR CASE OF HYDROPHOBIA (?) SEVENTEEN YEARS AFTER THE BITE OF A DOG, FOLLOWED BY PARALYSIS AGITANS.

By S. GOODEVE CHUCKERBUTTY, M.D.

JAS. C., aged 24, an indigo planter's assistant in the Mofussil, was brought down to Calcutta in a most helpless and deplorable state. The day after his arrival, I was called in to see him, when I found him in the following state.

He was struggling in a fit of convulsions, into which he had been thrown by the announcement of my presence. The mind was perfectly clear, and the speech rational, though interrupted by muscular spasms. The eyes were starting and rolling restlessly. There was a strong expression of alarm in the countenance, and violent working of the muscles about the neck; the patient crying out, gaspingly, "I am dying," "I am dying," repeatedly. The body was inclined; the legs resting on the bed, and the head and shoulders raised by two persons. The whole frame was convulsed; and he snapped at any one who came within the reach of his teeth. His mother, father, and sisters, were thus severely bitten in several places. The fit lasted about two minutes.

When tranquillised, he spoke well and intelligently; but on trying to give him some drink, the fluid was violently rejected, and there came on dreadful spasms of the throat, with a sense of choking, which made him jump up into the sitting posture and pitifully implore for help. His parents stated, that he had had many similar fits all through the night since his arrival, though his bowels had been freely moved by some purgative which had been obtained from a druggist.

On inquiry, I learnt that he had been ill in this way for three days in the factory, when another assistant, discovering the state in which he lay, immediately brought him down to Calcutta, and turned

him over to his family. This was on January 24th, 1864; and my first visit was paid on the 25th. He was bitten by a dog only once in his life, and that was seventeen years ago, when quite a boy, by a pet animal. He had not been bitten by any other animal. His health generally had been good, except that he had long suffered from spermatorrhœa, for which he had been under my own treatment at different times. Latterly, he had worked very hard, riding about the whole day, and exposing himself a great deal to the sun. His meals were irregular, and he never took stimulants of any kind—his drink being pure water. A sense of fatigue seemed to creep over him gradually, till at last he was suddenly seized with convulsions and general tremors, incapacitating him for work and even for rising from his bed. He had indulged much in venery long ago; and there was a small chance on his penis at the time.

With regard to his present state, he was very anxious to learn what was the matter with him. He told me that he felt very curious in his head, and that, though he could not drink water comfortably, the application of it to the vertex gave him great relief. His appetite was good; but he could not sleep for fear of choking.

On further examination, I found his urine abundant and clear; skin of natural warmth; face slightly flushed; pulse weak but frequent; abdomen soft; loins free from pain; spleen and liver healthy; heart's action and respiration good (though hurried during the fits.)

Besides the purgatives already mentioned, he had had some port wine and sago; of which, however, he could not make much use.

I continued the port wine, and ordered him as much solid food as he could eat. I also prescribed for him ammonia, sulphuric ether, compound tincture of lavender, and camphor mixture, every half hour; a gentian and opium pill at bed-time; and anodyne friction all over the body; leaving the chancres to be dressed with black wash, as he had been doing.

On the 26th, matters were much in the same state; he had passed a very bad night; several times his family thought he was expiring. The mixture had been given him regularly; and latterly he was able to swallow some of it. Since the morning, too, the snappishness had disappeared, and he had slept a little. He had taken food pretty well, and the bowels were freely moved; the stool and urine were natural. The same treatment was ordered to be still continued, with the exception that beer was substituted for port wine.

On the 27th, the restless rolling of the eyes and the muscular agitation were somewhat less, though the patient was still afraid to turn in his bed for fear of convulsions. The power of swallowing had increased, so that he took his medicines regularly. He drank, also, broth and water; ate some calves'-feet jelly; and was inquisitive as to what I thought of him. The bowels were constipated. He took to-day a dose of castor-oil, which operated well; and continued the same medicines as before.

On the 28th, the rolling of the eyes had ceased, the jerking of the head was less, and he had had no convulsive fit. He could sleep now without opium; and wished to know if he could bathe, as the application of a wet towel to the head gave him great relief. He also complained of weakness, and wanted something to give him strength. The opium was now entirely omitted; and sulphate of iron and gentian pills were given instead. The mixture was continued every hour. He took now some mutton-chops with relish. His clothes, also, were changed.

On the 30th, he was stronger and better, though still unable to rise, passing his excrements in bed.

So long as he lay perfectly still, there was no agitation of any kind; but the moment he attempted to move, the whole body was thrown into a state of tremor. The appetite and sleep were now remarkably good; and he ate well. He was told to take three pills a day, and the interval between the doses of the mixture was increased.

On February 3rd, he could sit up; and was allowed to take a warm bath, which stopped the convulsions for the day till the bed-time.

After this, his progress was steadily satisfactory, under the influence of generous diet, beer, sulphate of iron and gentian pills, warm baths, and gentle airing.

On March 5th, he paid me a visit at my house; and stated that he felt as strong as ever, though still unable to walk by himself.

In two weeks more, he was able to return to his work.

## Reviews and Notices.

RHEUMATISM, GOUT, SCIATICA, AND NEURALGIA: THEIR RATIONAL PATHOLOGY AND SUCCESSFUL TREATMENT. Illustrated by the Details of numerous Cases. By JOHN PURSELL, M.D. London and Brighton: 1864.

EXANTHEMATOUS DISEASES: THEIR RATIONAL PATHOLOGY AND SUCCESSFUL TREATMENT. To which are added Remarks on Hooping-Cough, Diphtheria, Croup, Laryngismus Stridulus, Chorea, and Erysipelas. By JOHN PURSELL, M.D. London and Brighton: 1864.

For many years Dr. PURSELL has, in the treatment of the diseases mentioned in the titles given above, adopted the plan of giving quinine or its allied alkaloid cinchonine from an early stage of the malady. The results of this treatment appear to have been in his hands very successful; in illustration of which, he relates numerous cases in detail, and also states, in a note to page 26 of the work on Exanthematous Diseases, that "in the epidemic of scarlet fever that prevailed at Brighton three or four years ago, he had in dispensary practice about seventy cases, including all varieties of the disease; and all recovered."

A sense of duty has led Dr. Purcell to lay before the profession the plan of treatment which he pursues, with examples of the results which he has obtained. He appears to have made out a very good case in favour of the early use of quinine in the various diseases referred to; and we recommend his views to the careful consideration of our readers.

AN INQUIRY INTO THE RELATIVE FREQUENCY, THE DURATION, AND CAUSE, OF DISEASES OF THE SKIN, ETC. By ERASMUS WILSON, F.R.S. Pp. 80. London: 1864.

THE observations made in this pamphlet are the results obtained from an investigation of one thousand consecutive cases of skin-diseases which have fallen under the author's notice. Mr. E. WILSON's object herein is to determine the relative frequency, the cause, and the duration of cutaneous diseases. The conclusions arrived at by a writer of Mr. Erasmus Wilson's large experience are necessarily of great value, and claim the attention of the profession.



Appended to the pamphlet is a note on the Exanthematous Epidemic of the Spring of 1864—the so-called *Rubeola Notha*.

ON A FORM OF BRONCHITIS (SIMULATING PHTHISIS) WHICH IS PECULIAR TO CERTAIN BRANCHES OF THE POTTING TRADE. By CHARLES PARSONS, M.D. Edinburgh: 1864.

ONE of the gold medals of the Edinburgh University was this year awarded to Dr. PARSONS for this graduation thesis. The subject is a thoroughly practical one. Dr. Parsons has had experience of diseases in the Potteries, having lived as house-surgeon in the North Staffordshire Infirmary. He now attempts to show in this thesis the very bad effects of the dust—the clay-dust—which is inhaled in large quantities by certain workmen in pottery ware. His thesis is a valuable addition to the history of the diseases of artisans.

## British Medical Journal.

SATURDAY, SEPTEMBER 24TH, 1864.

### SANITARY SCIENCE AND THE INDIAN ARMY.

THE report of the Commission on the Sanitary State of the Indian Army has just been published. At the date of its appointment, May 31st, 1859, it consisted of: Hon. S. Herbert; Major-General Sir R. J. H. Vivian; Colonel Sir P. T. Cautley, K.C.B.; Dr. Alexander, C.B.; Colonel E. H. Greathead, C.B.; Dr. W. Farr; Mr. J. R. Martin; and Dr. Sutherland. Since then, Dr. Gibson and Colonel Durand were nominated members of the commission; and Lord Stanley succeeded Lord Herbert. Appended to the report is a summary of the evidence, an abstract of all the reports from the stations in India, and a paper of comments on them written by Miss Nightingale. Among those who contributed to furnish the information are: Sir J. Lawrence; Sir C. Trevelyan; Sir A. M. Tulloch; Colonel Durand; Colonel W. Thompson; Brigadier-General Russell; Dr. Bird, late Physician-General to the Bombay Army; Dr. W. C. Maclean; Major-General Cotton, Madras Engineers; and others.

The English population in India amounted to only 125,945 persons in 1861—to less than the population of Marylebone. Of these, 84,083 went to compose the British officers and men of our Indian army; while 22,556 consisted of men and boys in civil life, including the civilians in the public service; the remaining 19,306 being females, of whom 9,773 were over 20 years of age. Taking the English children in India, it is found that the rate of mortality among them is lower than that which generally prevails among children at home; but, then, as they

advance in years, they grow feeble, and gradually wither away. This remark does not, however, apply to the children reared on the Hills. The mortality among the wives of officers, the commissioners regard as a fair representation of the mortality of English women in India; and this has been ascertained not to exceed 14 in 1000, between the ages of 20 and 40. The wives of the non-commissioned officers and soldiers do not fare so well; dying at the rate of 35 per 1000. Among the civil servants in India, between the ages of 20 and 45, the average rate of mortality per 1000 has been found to be little more than 20. In England, the mortality among men of the same age is about 9 per 1000. Among the natives of all ages in India, it amounts to about 51 per 1000; while, in this country, the number of deaths per 1000 is under 23.

In April 1862, the army in India numbered nearly 200,000; of which number, 3962 were European officers and 70,489 European non-commissioned officers and men. The average mortality of men of the soldier's age in the healthy parts of England is 8 per 1000; while, in the unhealthiest towns and in the unhealthiest trades, it is not more than 12 per 1000. In the British army at home, the mortality is 17 per 1000. In India, however, the death-rate of the English soldier has ranged from 41 in 1852, to 134 per 1000 in 1804. Fluctuating during a long series of years, the average mortality has been put at 69 per 1000; so that, taking the average mortality of men in England at the soldier's age at 9, it would seem that 60 in every 1,000 die annually in India owing to the special causes there in operation.

As regards the rate of mortality among the British troops in India of different ages, it is found that the mortality per 1000, between the ages of 20 and 25, is 56.4; between 25 and 30, 48.8; and between 40 and 45, 61.6. After the age of 55, the deaths grow less; and at 70 and upwards, old men die nearly at the same rate in India as in England.

But while the mortality of the soldier in India has been at the rate of 69 per 1000, that of the officers has been only 38; from which it would appear that the 31 deaths in excess are due to other causes than the climate. While the soldiers live together in numbers in common bed-rooms in barracks, the officers generally reside in separate bungalows; their food and drink are of superior quality; their contact with the sick in barracks is limited to periodical inspections, and when ill they have the advantage of being able to resort to healthy places. Similar causes operate in favour of the civil servants, the mortality among whom does not exceed 20 in 1000 at the soldier's age.

Disease, too, contributes to destroy the efficiency of the army in another way. In the stations of Bengal, 84 men in a battalion of 1000 were, on an average, constantly in hospital, a large proportion of

the cases being of a syphilitic character. With this amount of sickness, an army of 70,000 would require constant hospital accommodation for 5880 men; while, with a mortality of 69 per 1000, it loses yearly 4830, or nearly five regiments. The general tabular results show that 1000 effectives serving in India are reduced to 96 in 20 years; so that to maintain an army of 86,000 men a yearly supply of something like 10,000 recruits is necessary.

As regards the native corps, the mortality was somewhat under 8 per 1000; the average rate for the three Presidencies for the twenty years ending 1844 being 18 per 1000, 19 in every 1000 being the extent of the invaliding. Their superiority in health to the English soldiers has been explained on the supposition that their organisation is adapted to the climate; but there is no good ground for believing that the fact of their breathing their native air produces the marked difference which exists between an average mortality of 18 and 69 in every 1000. The men generally sleep outside the huts; and to the fact of their possessing separate huts, and not being cooped with several of their fellows in one sleeping apartment, much of their superiority in point of health to the European soldier is attributed.

The Commissioners dwell upon the expediency of taking steps to preserve the British soldier's life, not only upon the score of humanity, but also on that of economy. They find that £100 is on an average annually expended on the European soldier serving in India. A death-rate at 20 per 1000, to which amount the Commissioners express a confident opinion the present rate might be easily reduced, would render necessary only 1400 recruits *per annum*, instead of 5037, as at present; so that the excess of mortality presumed to be avoidable is absolutely 3577 lives in the year, and is equivalent to a tax of nearly £1000 a day. A careful examination of the causes of disease, and the character of the diseases prevalent in India, lead them even to cherish the idea that the day is not far distant when the natural death-rate in times of peace of men of the soldier's age in India will be no higher than 10 per 1000 *per annum*, which would bring it down almost to the English level.

The barracks at the several stations are constructed on a plan which prevents their being thoroughly ventilated, while the men are exposed to injurious draughts. The barrack-rooms, too, are generally greatly overcrowded; so that a large number of men are huddled together in one barrack. Another great defect in the present barrack accommodation is that the means of cleanliness are almost everywhere deficient. At the large station of Peshawur, where there were in 1860 between 1600 and 1700 men, no rooms for the purposes of ablution were to be found. The means of cooking in barracks, too, are very defective.

The Commissioners are of opinion that improve-

ment is much needed in this respect, as well as in the nature of the diet with which the troops are supplied. The Commissioners consider that the diet would be amply sufficient for men engaged in out-door toil in a cold climate. They find that the natives eat very little animal food, especially in hot weather. They had, also, before them the facts stated by Dr. Rennie, for several years in medical charge of convicts in Western Australia, to the effect that over-feeding and the too free use of animal food produced among those men much disease; and that improved health was the result of reducing the scale of diet. Dr. Rennie adds that, in his opinion, what are familiarly known as "the diseases of tropical climates" are, in reality, diseases occasioned by habits and circumstances of life unsuited to tropical climes; and that the relation which food bears to temperature is seriously overlooked in the dieting of bodies of men in the public service. The Commissioners, therefore, recommend that the diet of the soldier in India should be rendered more in accordance with the nature of the climate and his sedentary habits than it is at present.

As regards dress, the Commissioners strongly recommend the use of flannel underclothing, which Sir R. Martin looks upon as absolutely necessary as a preventive against chills and their frequent consequences—dysentery and liver-disease—in India.

The sanitary condition of European troops is seriously affected, also, by intemperance. Every soldier has a right to purchase at his regimental canteen two drams of spirits of good quality—generally rum or arrack—supplied by the commissariat; and it has been calculated that every soldier who avails himself of his privilege of dram-drinking, consumes eighteen gallons and a quarter of raw spirit in the year; but most of the men content themselves with one dram, taking instead of the second a quart of malt liquor. As a matter of fact, however, the troops do indulge in the habit of dram-drinking, which is most fatal to their health.

At some of the stations, the cases received into hospital, and attributable to intemperance, have been known to constitute about a tenth part of the total admissions from all diseases. Many of the medical officers object to the use of malt liquor as well as spirits in India, and propose as substitutes for it light wines, ginger-beer, tea, and coffee. In regiments where habits of temperance prevail, the health of the men is greatly improved. Of the 2nd troop 1st brigade Horse Artillery, in which a temperance movement was set on foot at Meerut, Mr. Dempster says, that he "had never before seen European troops in India in so good a condition in all respects." When the troop arrived at Meerut from Loodiana, it had fifty per cent. of its numbers actually in hospital; but, after a residence of four years at Meerut under the temperance system, it marched to Sealkote "with



a clean bill of health", no death having occurred among the men for a period of two years. The whole evidence, in short, goes to prove that the consumption of ardent spirits among the troops is a very potent cause of disease in India. The testimony in favour of the use of malt liquor is nearly as unanimous as that against the use of spirits; but it must not be imagined that the tendency of the evidence is to show that malt liquor is indispensable to the soldier; it only goes to prove that it is greatly less injurious to his health in a warm climate than spirits.

The Commissioners, moreover, find that the soldier, when sick, is exposed to agencies inimical to his recovery. The hospitals are, like the barracks, badly ventilated; the drainage is defective, and the water-supply almost universally bad; and no trained attendants are provided for the sick. These observations apply with still greater force to the hospitals for natives, in which the sole thing done to promote the recovery of the patients would seem to be to supply them with drugs. But the native, being permitted to reside in a separate hut, instead of in a crowded barrack-room, possesses an inestimable advantage over his European fellow-soldier.

The Commissioners also think that properly selected hill-stations, under a well conducted system of sanitary management, would be of great advantage to the health of the army.

To improve the sanitary administration existing in India, the Commissioners suggest the appointing a Board of Public Health for each Presidency, to give advice in all sanitary matters, such as the selection of new stations, and the improvement of existing stations and bazars; to examine new plans for barracks and hospitals, etc.; that an improved system of registering deaths and the causes of death should be established in all the large cities of India.

Such are the chief points discussed in this Report. Should the recommendations of the Commissioners be carried into execution, great and rapid improvement in the sanitary condition of the army serving in India will be the result. It is satisfactory, indeed, to know that, since the inquiry began, many of the evils detailed in the evidence have been removed, or are in progress of removal. Sanitary Commissions for the three Presidencies have been appointed, and put in communication with the Barrack and Hospital Improvement Commission at the War Office, to which two members representing the Indian Government have also been added; and, under their auspices, suggestions for carrying out sanitary works, including water-supply and drainage, as well as improved plans for hospitals and barracks, have been prepared and sent out to India; and it may be fairly anticipated that, when the proposed scheme of sanitary reform has come into full operation, an immense saving of European as well as native life will be found to be the result.

## LUNATICS ABROAD.

A CASE, in which is apparently involved the taking of a lunatic from this country to Belgium, has made some considerable excitement in the daily papers. We refer to the case of a supposed lunatic woman who was forcibly put on board a packet at Dover. The young woman was said to have been brought from Great Ormond Street; and the report has drawn forth the following letter from the medical officers of the institution there.

"The medical officers of the Hospital of St. John and St. Elizabeth present their compliments to the Editor of the *Daily Telegraph*. In a leading article of the 17th instant, he has commented upon the case of a patient who, labouring under insanity, was being conveyed to an asylum in Belgium, and referred to her as having come from the hospital to which they are attached. They beg to be allowed to state that she was not a patient of the hospital, nor a member of its community of nursing sisters; nor was she ever seen by the medical officers, who, indeed, only learned the occurrence from the notice in the papers. They understand that the patient was merely at the convent for a few hours before proceeding to her destination.

"St. John's and St. Elizabeth's Hospital, 47, Great Ormond Street, Queen's Square, Bloomsbury, Sept. 20."

We refer to the case because, assuming the young woman to have been a lunatic, there is manifestly something required in the way of interference on the part of the Lunacy Commissioners to justify such violent extradition of a subject from England. On this subject, we would refer our readers to an article in this JOURNAL of June 6th, 1863, "On Lunatics in Foreign Asylums". In that article, we related certain facts, on the authority of Dr. Robertson; and those facts showed demonstratively that our Lunacy Commissioners ought to have some control or power of visiting English lunatics in foreign asylums. Dr. Robertson tells us that lunatics are provided for much more cheaply in Belgium than here; that patients are often there consigned to an inevitable doom; that the plot of *Lady Audley's Secret* is not wholly a romance; that he has known cases in which one payment *for life* has been made, and then asks, "What chance of cure in such a case?"; and that patients may be unknowingly kidnapped and consigned to a foreign asylum—"not a pleasant abode, or one from which escape or release is easily got." In a Parliamentary Committee in 1859, Lord Shaftesbury stated that there was no legal check to prevent such a transportation of lunatics out of England. We sincerely trust that this case may be the means of calling the attention of lunacy authorities to the necessity of bringing the extradition of lunatics from this country under some regular legal restrictions. No doubt, in respect of the case in point, our Lunacy Commissioners will satisfy themselves that the demands of the Lunacy Law were duly and fully complied with.

WE are glad to find Mr. Carter shows signs of contrition, by attempting to smooth down the obvious meaning of his own words. As, however, he accuses us of "garbling", and of "supporting incorrect statements by a misquotation", we will give extracts containing the very words of his circular letter.

"The first duty of the Board," says Mr. Carter, "will be to decide points left open by the report, and consequently left open by the vote of the Annual Meeting. First among these questions will be the subject of my protest, namely: Shall the Provident Fund be open to all members of the profession, or shall it be limited to members of the British Medical Association?"

"The majority of the Committee, who were and are in favour of the limitation, regarded the matter from an Association point of view. I mean that they are old members of the Association, that they have laboured for it in various ways for many years, that they are proud of its progress, and hopeful of its future. They think that it will become an important political engine for the elevation of the profession, and a power that the Circumlocution Office will not be able to ignore. *They think that the Provident Fund will strengthen the Association; and they therefore welcome it for the sake of the Association, rather than for the sake of the men who will chiefly need its help.* I, on the other hand, and those who think with me, while we should rejoice to see the most sanguine anticipations of the friends of the Association realised, yet feel that there are many practitioners whom sickness would render destitute. There are men of small capital striving to establish themselves; there are qualified assistants who aid in maintaining widowed mothers or younger brothers and sisters; and there are established practitioners who, from local circumstances, are almost precluded from earning incomes sufficient for their needs. I conceive that it would be an act of cruelty to call upon such men to subscribe an annual guinea to the British Medical Association, before admitting them to become members of the Provident Fund."

We would call Mr. Carter's attention to the words which we have italicised, and ask him, Does he call this "attributing no motives"? We can tell him that members of the Committee do not so consider his words. Mr. Carter is really amusing when he pretends to make out that the "pressure" alluded to, to be put on the Directors, is merely of a moral kind. Our readers shall judge from his own words. After some remarks on the JOURNAL (to which we shall return), he suggests that the organisation of the Association is, after all, likely to be very valuable to the Provident Fund; and recommends that every subscriber to the Provident Fund should contribute *two shillings* a year to the executive expenses of the Association.

"The Board of Directors should be applied to, as soon as formed, to admit subscribers upon such a basis.

"That such a proposal may be acceded to, those who are in favour of it must bestir themselves. They must endeavour to procure the election, by the Branches in their respective neighbourhoods, of Directors who will support it at the Board; and they must seek to obtain the names of practitioners who wish for admission on the terms proposed. *I should like the Directors to consider the question of limitation,*

*under the pressure of 200 or more applications from gentlemen who are not members of the Association, and who are prepared, in the event of being refused, to establish a separate fund of their own. From all such I shall be most happy to receive communications."*

This is merely "a pressure of evidence—an aid to the discovery of truth!" Does Mr. Carter take us for children? Can any one but Mr. Carter read the words which we have italicised, and not see in them a positive defiance to the Directors to act otherwise than as he would have them to act? Mr. Carter wants an apology from us. In reply, we tell him that the apology needed is one from Mr. Carter to his late colleagues in the Committee and his colleagues in the Direction of the Provident Fund (if he have the courage to meet them there), and to the associates generally for saying that their JOURNAL "supports incorrect statements by misquotation". We have not wasted the space of this JOURNAL by publishing his address entire; but the above quotations contain the pith of it. We will, nevertheless, flatter his vanity so far as to give one more extract from his circular—the impertinence which he introduces into it about this JOURNAL, when addressing, be it remembered, some hundreds of gentlemen not members of the Association.

"The meetings, and speeches, and dinners, are necessarily limited to men in comparatively easy circumstances; and the less affluent members receive for their subscription only a copy of that JOURNAL upon which about ten-elevenths of the income of the Association are expended, and which must always, from the operation of commercial laws, be inferior to its contemporaries that are maintained by private enterprise. The present deplorable position of the JOURNAL, and its recent advocacy of superficial attainments and of trading greed, although they cast some reflected discredit upon the Association, are yet mere accidents, due to causes that are temporary, or, at least, that admit of being removed. Still the fact that such accidents are possible, that they have occurred, and may recur, increases the hardship of asking any man to pay for a publication that may offend his taste and judgment in every number, and that he cannot discontinue without forfeiting his right to obtain provision during sickness."

Our friends in the *Lancet* could hardly beat this. Is it unreasonable, considering the tone of this paragraph, its thorough agreement with the *Lancet* opinions, and the fact that Mr. Carter's letter has received the editorial approval of the *Lancet*, to conclude that Mr. Carter has been, in lawyers' phrase, instructed by the *Lancet*?

MR. TALLEY, a solicitor, residing at Beaconsfield, is endeavouring to do good service by instituting prosecutions against persons falsely pretending to be legally qualified members of the medical profession. One case in which he has prosecuted has been heard in the Marlborough Street Police Court; and other summonses for infringements of the Medical Act have also been granted in the same court at his request. It is incorrectly stated in the public papers



that Mr. Talley represents the Medical Council of Education and Registration; he is conducting the prosecutions on his own responsibility, but has, of course, applied for and received certain necessary information at the office of the Medical Council. His first case was heard at the Marlborough Street Police Court on Wednesday week; when Mr. Francis Bearnard, "surgeon-chiroprapist", No. 59, Regent Street, appeared to answer a summons under the new Medical Act, for unlawfully, wilfully, and falsely pretending to bear, and taking and using, the name of "surgeon", implying that he was registered under the Medical Act as a surgeon. The defendant had on his door a plate with the words "Surgeon-Chiroprapist to the Royal Family." The magistrate, Mr. Tyrwhitt, adjourned the case for a week; and on Wednesday last delivered his opinion as follows.

"I have considered this case; and it appears to me that 'surgeon', though prefixed to 'chiroprapist', cannot be treated as mere surplusage, but must have a meaning, and was intended to have one. That meaning must be measured by the general acceptance which the great body of mankind passing the defendant's door-plate would ascribe to the words used there. I think, on the whole, that these words would convey to them that a surgeon, duly qualified and registered as such, practised at the house in question as a chiroprapist. Taken to be such a surgeon, he would command more confidence with those who sought his aid as a chiroprapist; and, not only that, but he might naturally be consulted by them in surgical matters beyond the mere treatment of corns. On the whole, if the defendant will remove from his door-plate and cards the word 'surgeon', I might consider as to mitigating the penalty, which is £20, and in that hope would adjourn my decision till this day week. But if the defendant requests me to grant a case for the opinion of a superior court I will do so. In that case, it will be needless to adjourn the case, and I fine him £20." After some consultation between Mr. Lewis (who defended) and Mr. Bearnard, the defendant decided to take a case for a superior court.

In striking contrast to this case, was one which was on the same day (Wednesday last) brought before Mr. Paget, in the Thames Police Court, Mr. Fentiman, a chemist, druggist, and medicine vender, of No. 2, Upper East Smithfield, appeared to answer a summons taken out by Dr. Wills, a registered medical practitioner, of No. 22, Upper East Smithfield, which charged the defendant with wilfully and falsely pretending to be, and taking and using the name and title of a surgeon. Evidence was given to shew that the defendant designated himself as a surgeon on his printed bills, his name not appearing in the *Medical Register*. Mr. Paget, however, said that a conviction under a similar charge had been quashed by the Court of Common Pleas in 1860, and intimated his intention of dismissing the case; but on the representation of the plaintiff's counsel that, as he believed, there were other convictions which had not been quashed, he consented, with some reluctance, to adjourn the summons for a week.

A MEETING of members of the medical profession was held in Calcutta on August 3rd, at which it was resolved to raise a subscription for the purpose of perpetuating the memory of the late Surgeon Llewellyn, of the *Alabama*. A committee, consisting of Drs. Gordon, Chevers, Fayrer, Beaton, and others, was also formed for the purpose of carrying out the resolution, in communication with the profession in India and England; and Mr. S. B. Partridge was appointed honorary secretary. The sum of 909 rupees (about £90) was subscribed at the meeting. In their circular, the committee say:

"In appealing for aid to our professional brethren throughout Bengal, we feel that our cause is a good one. Noble conduct, such as that of Mr. Llewellyn, richly merits the recognition of his own profession; and we shall be doing no less honour to ourselves, than to his memory, if we place on record, by a befitting memorial, the high sense we entertain of the exalted self-devotion with which he gave up his life to his duty, in refusing to imperil the lives of the wounded by entering the boat in which he was invited by his brother officers to leave the sinking ship. History records no nobler instance of self-sacrifice than the death of this surgeon, the only officer who perished in the engagement."

The Calcutta Committee are desirous of co-operating with any movement made in England to perpetuate the memory of Mr. Llewellyn.

THE *Wien. Med. Wochen.* gives, in a late number, an account of successful German doctors in Paris, and compares the liberality of the French faculty with the narrow-mindedness of the German faculties. He refers to Gruby, Liebrich, Mandl, Meding, Ottenburg, and Sichel.

"Dr. Gruby we well remember as a poor student in Vienna, a hard-working anatomist under Hyrtl, Rokitsky, and Koletchker. Gruby, as a Jew, had no prospect of admission to the University here; and, in fact, he was not permitted to practise here. He went to Paris poor in everything but scientific knowledge; and there won the character of a *savant*, and obtained a very large private practice. Dr. Liebrich, who had been assistant of Gräfe in Berlin, has in a very short time, about two years, obtained an excellent position as an oculist. Dr. Mandl is at present chiefly occupied with the laryngoscope. Also well known in Paris are Drs. Wecker, Mayer, and Herschel, all three of whom are oculists, and enjoy the especial protection of Gräfe, who every year goes to Paris for at least a month, and also practises there. Drs. Meding, Sichel, Ottenburg, and Schuster are representatives of the senior German school in Paris."

The prize of 50,000 francs (£2,000), founded by the French Emperor in 1852, to be adjudged in five years to the author of the most useful applications of the voltaic battery, has been given to M. Ruhmkorff. None of the works presented for the prize in 1857 were considered worthy of it; and the prize was, therefore, opened a second time, and has now been adjudged as above stated. A long report by M. Duruy, concerning M. Ruhmkorff's labours, is inserted in the *Moniteur*.

## Association Intelligence.

### SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the Bull, at Rochester, on Friday, September 30th, at 3 P.M.

Dinner will be ordered for 5 o'clock.

Tickets, 6s., exclusive of wine.

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, September 14th, 1864.

### WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., *Hon. Sec.*

Taunton, September 1864.

### SOUTH MIDLAND BRANCH.

THE Autumnal Meeting of the South Midland Branch will be held at Buckingham, on Tuesday, October 18, at 1 P.M.; H. VEASEY, Esq., President.

Gentlemen intending to read papers or cases, are requested to forward the same, as early as convenient, to Dr. Bryan, Northampton.

JOHN M. BRYAN, M.D., *Hon. Sec.*

Northampton, September 1864.

## Correspondence.

### MR. CARTER AND THE MEDICAL PROVIDENT FUND.

LETTER FROM R. B. CARTER, ESQ.

SIR,—In your article in the JOURNAL of the 17th instant, and in your remarks appended to my letter published therein, you say that I repeat an *accusation* against my colleagues in the Bristol Committee. You also say that my circular letter conveys that certain members of the Committee had *no object* in view, in planning the Provident Fund, but the aggrandisement of the Association; that, in fact, *they were not influenced by a sentiment that the Fund should be made useful to the profession*. You profess to quote me when you say that the majority of the Committee “welcomed the Fund merely for the sake of the good it would do to the Association.” You say it is “an insult to attribute to the majority of the Committee any sinister motive; or to insinuate that their intentions were less pure,” etc.; thereby implying that I have attributed “sinister motives,” or “less pure intentions.” You say that I repeat the opinion that my colleagues were *selfishly* engaged for the sake of improving the Association; and your remarks contain more matter of the same kind, which it is not needful to particularise.

I think it is due to myself to seek to inform your readers that the passages I have quoted, have no foundation in anything that I have either said or written. I have brought no accusations. I have attributed no motives. Your groundless charges compel me to tread on the very confines of a liberty; and to assure my colleagues that, both for their motives

and their opinions, I entertain the highest and the most unfeigned respect.

What I have really written, amounts to this. In a Committee occupied in considering two distinct undertakings, namely, the Association and Provident Fund, and thoroughly convinced of the actual or prospective value of each, there arose a difference of opinion with regard to the relative or comparative importance which, at a given time, should be assigned to them. Ought A, or B, at that particular conjuncture, to be considered the primary object? I have stated reasons why the minds of certain persons might be expected to lean in one direction; and I addressed those whose minds might be expected to lean in the other. Upon such a question it would be absurd to impute motives; and it might even be difficult for anyone to analyse with exactness the whole of the train of thought that led to his individual conclusion.

I should like to point out also, that the “pressure,” to which you object, would only be a pressure of evidence, which most people would value as an aid to the discovery of truth. If a number of gentlemen, not members of the Association, were desirous of admission into the Provident Fund, their desire would prove the existence of an important element of success, outside the limits of our body.

In conclusion, I wish to say a few words upon another aspect of the question. You have very freely put into my mouth your own interpretations or imaginings, and have then written as if I were responsible for them. Professing to give my “words,” you do not inform your readers at what part of the sentence my words end, and your own composition recommences. I trust that, upon reflection, you will perceive that an apology is due to me for this most unfair and disingenuous garbling. Considering that the present is not the first occasion on which your JOURNAL has supported an incorrect statement by a misquotation, you could give no better evidence of good faith than by printing my circular letter, as your contemporaries have already done. For this, however, I do not press. I imagine that you cannot refuse to make me some amends; or, if you do refuse, I shall certainly deem your future errors entirely unworthy of notice or refutation.

I am, etc., ROBERT B. CARTER.

Stroud, September 14th, 1864.

LETTER FROM HENRY GRAMSHAW, ESQ.

SIR,—I hope I shall not be accused of egotism, if I venture to make a few remarks on the subject of the Medical Provident Fund and Mr. Carter's present line of action. I think it is much to be deplored that any member of the original Committee for the formation of the Fund, should be led by the strength of his convictions to run the risk of marring the fair project we have in view. As you say in your leading article, I was one of the members of the profession who wrote several of the earliest letters on the subject of the formation of a Provident Fund; but I never thought or dreamt of it being established for the *sake of the Association*. Unfortunately, I was unable to be present at the Committee meetings; though I wrote and stated my views to the chairman. I hope it is no breach of confidence for me to say, that in my letter I urged a wish that the advantages of the Provident Fund “should not be confined to the members of the profession who belong to the British Medical Association only.”

Now, though I felt, and do feel, that we ought to allow the advantages of a Medical Provident Fund to be *very widely spread*—and we shall consult our best interests by doing so—yet I recognise the British



Medical Association as a very valuable means of laying the foundation stone of the structure we are about to erect.

I do not know why anyone should feel aggrieved if the Medical Provident Fund *does* strengthen the Association. For my part, I hope it will; assuredly not because the Association requires to be bolstered up by it, but because the British Medical Association delights to act as pioneer in every movement which has the best interests of the profession for its primary object. And, more than this, I have such confidence in the Association in general, and the Board of Directors of the Fund in particular, that I do not doubt that, when they have cleared preliminary difficulties from their path, they will welcome the profession at large to share all the advantages they have to offer. Sincerely hoping that the sparks of fire already struck are mere indications of the life and warmth of the movement, and that asperity will give place to good tempered zeal,

I am, etc.,

HENRY GRAMSHAW.

Luxfield Villa, near Framlingham, September 20th, 1864.

## TREATMENT OF PARTURIENT WOMEN.

LETTER FROM THOMAS POPE, ESQ.

SIR,—In the *Lancet* of the 3rd inst., under the head of Clinical Conferences in Midwifery, held at St. Mary's Hospital Medical School, by Graily Hewitt, M.D., there is a doctrine which I am impelled, out of a desire to discharge an incumbent duty, to ward off as much as in me lies; particularly his advocacy of a "full, generous, and the usual diet when in health", for a woman immediately after delivery. Perhaps, it may seem too severe when I designate it as

"Masticum horrendum, infirmum, ingens, cui lumen ademptum."

What is the state of a woman so circumstanced? The gravid uterus, particularly in the latter half of pregnancy, has so compressed the whole of the abdominal viscera, and more so those immediately connected with the digestive function, as to leave them in a state unfit for such a diet; and if it be administered, it must so interfere with the heart's action as so to accelerate it, and constitute fever with its natural consequences, anorexy, innutrition, debility, etc.; so that the quieter the heart be kept, her safety and well-being are better consulted. The biliary and other chylipoietic viscera are then more or less deranged; the pulse is generally accelerated, also, more or less, according to the parturient process; and to put the patient on a diet which would aggravate these evils, must come within the category of my quotation. Another most important process alike forbids such treatment. Generally, before the secretion of milk is fully formed, fever must supervene; and this is mainly regulated by the diet; and the more this is on the orthodox plan recommended by the most celebrated authors, Lowther, Haighton, Churchill, Ramsbotham, Smith, etc., the more is it mitigated, and the patient more speedily restored to her wonted health; whereas, by the opposite treatment, the liver and other parts may be very much injured, not only functionally, but even organically. *This is the doctrine I believe to be founded on truth; et magis est veritas et perarabit.*

1. Milk-fever is included in the foregoing.
2. Puerperal peritonitis, puerperal fever, phlegmasia dolens, etc. Under these heads, much may be said; but I do not see how these affections can be amended by Dr. Hewitt's method of diet.
3. Puerperal mania. The only three instances I have seen in my very protracted and eminently successful practice, of upwards of sixty-four years; the first was from interference with lactation and gene-

rous diet, the second from generous diet, and the third from fright.

4. Sudden death during the puerperal state. On this head I have had no case.

5. Protracted convalescence. Of all that I have seen of this, I never observed one the effect of low diet prior to the formation of milk; but many of the opposite plan.

The sum and substance of the preceding observations are, to allow the system to recruit itself by abstinence from stimulants till the milk be fully formed; and then, and not till then, *ceteris paribus*, a generous diet.

Regretting any difference of opinion with such an ornament of the profession as Dr. Hewitt, and hoping to make a convert of him, I will say to him, with all sincerity, *Deus tibi benefaxit.*

And now, sir, let me say a few words on the ranting and raving of the editor of the *Lancet*, all of which I see is a matter of £ s. d. His reasoning is most flimsy. He tells us, that our JOURNAL is valueless, and that we ought to be content with a yearly volume of *Transactions*, in hopes that it may bring that grist to his mill; but we know too well the value of it for such sophistry to mislead us; for the guinea which each member of our increasing and illustrious Association pays, he receives that indispensable information contained in our JOURNAL, *nulli secundus*, with the annual saving of fourteen shillings. Our editor caters so well for us as to render the volume of *Transactions* unnecessary. Therefore, let us foster the BRITISH MEDICAL JOURNAL, and heartily wish that *semper floreat et increseat.*

I am, etc.,

THOMAS POPE.

Clo Mary Mortimer, Salep, September 16th, 1864.

## GUNSHOT-WOUND OF THE FOOT: PYEMIA: ERYTHEMATOUS RASH OVER THE WHOLE BODY.

LETTER FROM I. HARRINSON, ESQ.

SIR,—Will you have the goodness to publish in an early number of the JOURNAL the following case, kindly supplied me by F. S. Butler, Esq., one of the surgeons of the Winchester Hospital.

I am etc., I. HARRINSON.

Reading, September 17th, 1864.

"MR. S., a member of a mounted volunteer corps, of middle station and sanguine temperament, in robust health, on July 2nd, 1863, whilst resting his rifle on his foot, forgetting that it was loaded, pulled the trigger for the purpose of exploding a cap, and shot his foot.

"The ball passed through the second phalanx of the fourth toe, shattering the bone. Surgical aid was soon obtained, and the toe removed; after which he drove home, a distance of seventeen miles, and went to bed. He was seen the following morning by his ordinary medical attendant, who enjoined rest, and applied water dressing to the foot. He was considered to be going on well for some days; but on the evening of the 8th, he not being so well, I was requested to see him, and found his condition extreme. He had great prostration of strength; his mind was wandering at times, but he was quite conscious when roused; pulse rapid and feeble; abdomen tense and tympanitic; he had hiccough; a dry and brown tongue; occasional vomiting and purging of dark matter; scanty and high-coloured urine. The toe was sloughy and very offensive, but not inflamed or tender when touched. There was no swelling of the foot, nor evidence of any inflammation of the absorbents or veins; but the whole surface of the body presented a red

appearance, as if covered with the rash of scarlet fever. There was no sore-throat; nor was there any scarlet fever in the neighbourhood. The house stood alone, quite in the country, and far removed from any other dwelling. I regarded the case immediately as one of pyæmia, and ordered brandy, champagne, etc., *ad libitum* and eggs, beef-tea, and brandy by rectum, plenty of fresh air, and Condy's solution to the foot. A catheter was also introduced into the bladder, and a considerable quantity of dark coloured urine drawn off.

"During the next few days, there was some improvement in the symptoms. The tympanic condition of the abdomen subsided; the hicough and sickness lessened; the wound began to put on a more healthy appearance; and there was much reason to hope that the vital energies would be equal to the conflict and to expel the poison from the blood; but, alas! on the afternoon of the 12th, ten days after the accident, a violent attack of diarrhœa came on, which resisted all the means used to restrain it, and death speedily followed.

"The skin retained its red appearance, though it assumed a darker hue, to the very last.

"Winchester, October 20th, 1864.

## TEACHING OF BOTANY IN MEDICAL SCHOOLS.

LETTER FROM MAXWELL T. MASTERS, ESQ.

SIR,—In an article in your impression of the 3rd inst., referring to the manner in which botany is taught in the medical schools of this country, you have cast an imputation upon the teachers of this science, which is not altogether merited.\* Your statements are based upon those contained in an able paper in the July number of the *Natural History Review*. The writer of that article really acquits the teachers, and lays the blame on the examining bodies, who prescribe a certain course to be followed both by teacher and pupil.

I have no intention, in this communication, of entering upon any defence either of the system or of the lecturers. My object is simply to correct some mis-statements; and to point attention to the causes of the dearth of botanists in this country.

The bill of indictment against the medical schools is, as you say, "that they turn out no botanists." This raises the question as to whether it is the proper function of the medical schools to turn out botanists? Is it desirable they should do so?

Most, if not all, the botanical lecturers, as also the writer in the *Review* in question, look upon botany, as introduced into the curriculum, simply as a means to an end; and that end is mainly the culture of those habits of observation and reflection which are to be hereafter exercised in the study and practice of medicine. In addition to this, it is obvious that physiology cannot be properly learned without some insight into the nature of plant life, as well as of animal life.

But is it true, that the schools have turned out no botanists? On the contrary, is it not a fact that the great majority of botanists, from Theophrastus to Robert Brown, have been educated—nay, have even practised—as medical men? and, even in our own time, when the range of science has become so vast, that men can no longer hope to excel in more than one branch or subdivision of science, have there not been turned out from the schools such botanists as Joseph Hooker, Thomas Thomson, William Griffith, W. H. Harvey—in fact, the greater portion of the leading botanists of the day?

It is not necessary to enter into detail as to the method pursued by botanical lecturers; suffice it to say, that the course followed is one laid down for them by the authorities; and it is one which, in most if not in all the schools, involves a great deal of practical demonstration, while the pupils are encouraged to write descriptions of plants, or fill up "schedules", which are corrected by the teacher. This practice of writing correct, terse descriptions, is peculiarly valuable; and it is one which is adopted by all the more intelligent and diligent of the pupils, and might be followed by all the members of the class if they chose. The great difficulties that lecturers have to contend with are these: first, the utter ignorance of the pupils generally in natural science when they come up to a medical school—a defect chargeable to the universities and schools, but one which seems likely to be surely, if slowly, remedied; the next great obstacle to the teacher's success is this, that the time allowed for the acquisition of botany is barely three months.

The best men—those most likely, under propitious circumstances, to be turned out as botanists—are those preparing for the Preliminary Scientific Examination at the University of London. The authorities of that institution have very properly established a Preliminary Scientific Examination, obviously intending that the studies to be undertaken for that end shall be completed before the pupil enters upon his more strictly professional studies. What happens generally is this, that the preparation for this ordeal is wholly deferred until after the student's entry at a medical school. The ordinary routine of the first winter session is gone through; and when the summer arrives, the pupil sets to work to "read up" mechanical and natural philosophy, chemistry, organic and inorganic botany, and vegetable physiology and zoology. All these, with the exception of chemistry (supposed to have been learnt during the winter), have to be "got up" in three short months. Is it wonderful that the Examiners find the pupils crammed with details of which they know not the import—with principles of which they know not the application.

If the candidate be fortunate enough to pass this examination, he gives no further heed to these preliminary studies; but devotes his whole attention, and properly so, to more practical work.

What is the remedy for this state of things? How can the schools be made to turn out botanists? How can the system of botanical teaching be improved?

The answers to these questions are not difficult to find. Secure a reasonable income to botanists, and men would be found whose tastes and abilities would lead them to follow botany as a profession. As it is now, scarcely one of the botanists, great or small, of this country, live on means afforded them by their favourite pursuit. Most of the botanical lecturers are engaged in medical practice, and could not live without its aid. In the next place, make the study of botany, or at any rate the elementary portion of it, strictly preliminary to professional education.

Botany, if introduced into the curriculum at all, should be "advanced botany." The pupil, with his elementary knowledge, would, when he entered upon the advanced class at the medical school, be far better enabled to estimate the bearings of the science on his medical studies than he now is; would be far more likely, should his tastes and means allow him to do so, to pursue it for its own sake.

Medical practitioners and students seem at present hardly aware of the facilities afforded them by the Society of Apothecaries for the prosecution of botany. The Society has already done much towards the re-organisation of the Physic Garden at Chelsea; and

\* We cast no imputations whatever. We merely repeated the opinions of the able writer in the *Natural History Review*. EDITOR.



further improvements are contemplated, under the supervision of N. B. Ward of fern-case notoriety—a medical man, he it observed.

It is greatly to be wished that the Society would re-institute the botanical demonstrations, such as, a few years since, were given by Professor Lindley, and which live in the memories of those whose tastes or avocations still link them to the pursuit of the "*Amabilis Scientia*." Apologising for the length of these remarks,

I am, etc.,

MAXWELL T. MASTERS,

Lecturer on Botany, St. George's Hospital.

### CRIMEAN MEDICAL OFFICERS.

SIR,—I was glad to see that you noticed the remarkable omission in the address of Dr. Gibson to the Prince of Wales at Netley, of any mention of medical officers having been killed. It is true that, in the Crimea, the majority of the medical officers who died, did so from disease, they having been worked much more severely than other officers; but it is also true, that the first officer killed in the trenches was Assistant-Surgeon O'Leary, of the 68th Regiment; and it is scarcely right that that fact should have been ignored.

Mr. Le Blanc, surgeon of the 9th Regiment, was also killed in the Crimea; but he was killed by a French sentry, and not by the Russians. I do not think that any other medical officers were killed out there; but many were wounded.

The omission of any notice of Mr. O'Leary's death, and the pointed manner in which Dr. Gibson stated that the greater number of the medical officers died of disease, was doubtless appreciated by those combatant authorities whose delight it is to depreciate the services of medical officers, and to ignore the fact of their being exposed to the same dangers as themselves; that there are individuals of that description, I am well assured; for I am aware of an instance of a certain "centurion" having told a lady of my acquaintance, that "it was quite a mistake to imagine that doctors were exposed to fire"; and that gentleman had served in the trenches, and could scarcely have failed to have met there one of the four "doctors" engaged there daily.

That a large proportion of "combatant" officers freely acknowledge the services of the medical officers, and their claims to equal honours with themselves, there can be no doubt; and I trust that very few indeed would deny openly that medical officers are "exposed to fire" as much as themselves; but we cannot shut our eyes to the fact that the authorities and the military journalists (notably him of the *Army and Navy Gazette*) delight in offensively applying the term "non-combatant" to them, and desire to treat them as an inferior race.

I trust that on the "Cross at Netley" they will not fail to specify that Assistant-Surgeon O'Leary and Surgeon Le Blanc were killed. I am, etc.,

"ONE WHO HAS SERVED."

September 15th, 1864.

**HEALTH OF SCOTLAND.** The Registrar-General's monthly return for the eight principal towns of Scotland shows that the births, deaths, and marriages all continued to be far above the average in August. The zymotic class of diseases caused 27 per cent. of the deaths, and in Greenock as many as 46 per cent. from the combined fatality of scarlatina and typhus. Typhus was the most fatal. Greenock, Perth, Aberdeen, and Glasgow are the towns where this disease has been more especially prevalent.

## Medical News.

**APOTHECARIES' HALL.** On September 15th, the following Licentiates were admitted:—

Bennett, Francis Graham, Brighton  
Grace, Alfred, Downend, near Bristol  
Sheldon, Edwin Mason, Liverpool  
Shottelworth, George Edward, Russell Place, Fitzroy Square  
Vipan, William Henry, Ely, Cambridgeshire  
Witcherly, William Henry, Combe, near Croydon

At the same Court, the following passed the first examination:—

Edmonds, Charles George, St. Thomas's Hospital  
Wilton, Francis, St. Bartholomew's Hospital

### APPOINTMENTS.

#### ARMY.

ARMSTRONG, Surgeon W., 9th Foot, to be Staff-Surgeon, vice Surgeon-Major J. C. Stewart.  
BEATTIE, Staff-Assistent-Surgeon J. F., M.D., to be Assistant-Surgeon 79th Foot, vice G. N. Irvine, M.D.  
CLARKE, Staff-Surgeon P. J., to be Surgeon 5th Foot, vice Surgeon-Major J. Mc'Gur Grant, M.D.  
DAVIS, Staff-Assistent-Surgeon J. N., to be Assistant-Surgeon 4th Foot, vice A. Royle.  
DUNLOP, Staff-Assistent-Surg. R., to be Assistant-Surgeon 10th Foot.  
GILBORNE, Surgeon E., Royal Artillery, to be Surgeon-Major, having completed twenty years' full-pay service.  
GRANT, Surgeon-Major J. Mc'Gur, M.D., 84th Foot, to be Staff-Surgeon-Major, vice P. J. Clarke.  
GREENHILL, Staff-Assistent-Surgeon J. R., to be Assistant-Surgeon 72nd Foot, vice J. J. Pope.  
JEE, Surgeon-Major J. C.B., 78th Foot, to be Surgeon 1st Dragoons, vice Surgeon-Major A. Forteach, M.D.  
McGRATH, Staff-Assistent-Surgeon E., to be Assistant-Surgeon 8th Hussars, vice H. Sherlock.  
SAUNDERS, Staff-Surgeon G., to be Surgeon 9th Foot, vice W. Armstrong.  
STEWART, Staff-Surgeon-Major L. C., to be Surgeon 78th Foot, vice Surgeon-Major J. Jee, C.B.  
TUSON, Surgeon E. B., 17th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.

#### To be Staff-Assistent-Surgeons:—

|                                     |   |
|-------------------------------------|---|
| AMBROSE, J., M.D.                   | JOHNSON, W., M.D.   |
| ANDERSON, J.                        | JOHNSON, F., M.B.   |
| ATRINSON, G., M.D.                  | KING, J. G.   |
| ATRINSON, J.                        | KIRKWOOD, T. M.   |
| ATRINSON, W.                        | LESLEE, D. A., M.D.   |
| BABINGTON, T.                       | LITHGOW, A. M. S., M.D.   |
| BALL, J. J., M.D.                   | MALCOLM, J. V. T., M.D.   |
| BARNWELL, Assistant-Surgeon T.      | MAXHAM, J. W., M.D.   |
| Rifle Brigade, vice J. N. Davis     | MELLADEW, H. F. I., M.D.  |
| BARROW, T. S., M.D.                 | MIDDLETON, J., M.D.   |
| BOLSTER, T. G., M.D.                | MINTY, A., M.B.   |
| BURKE, J.                           | MUIR, H. S., M.D.   |
| BURNSIDE, Assistant-Surgeon G.      | ORWIN, T. W.  |
| S., 51st Foot, vice J. R. Greenhill | PHILLIPS, H. H., M.B.   |
| CHURCHILL, C. F., M.B.              | POUT, Assistant-Surgeon F., 16th Foot, vice J. Beattie, M.D.        |
| COGAN, M.                           | ROSS, D. P., M.D.   |
| DAVIES, R. W.                       | SHEWLOCK, Assistant-Surg. H., 8th Hussars, vice W. W. Quanten, M.B. |
| DOOLEY, G. F.                       | STOCK, J. N.  |
| DUNLOP, R.                          | TURNER, R., M.D.  |
| EINEGAN, J. B.                      | WALACE, J., M.D.  |
| FLEMING, J., M.D.                   | WATTS, A. N.  |
| GRAY, J., M.D.                      |   |
| HICKSON, R. C. C.                   |   |
| HYDE, R.                            |   |

#### To be Assistant-Surgeons, Royal Artillery:—

BERKELEY, Staff-Assistent-Surgeon R. W.  
BYVINGE, Staff-Assistent-Surgeon A. W., M.D.  
BRACKEN, Assistant-Surgeon J. H. N., 54th Foot.  
CLARKE, A. F. S., M.D., 42nd Foot.  
DAVIDGE, Staff-Assistent-Surgeon J.  
FAUGHT, Staff-Assistent-Surgeon J. G.  
GODWIN, Assistant-Surgeon C. H. Y., 18th Foot.  
HALL, Assistant-Surgeon A. R., 52nd Foot.  
HAMILTON, Staff-Assistent-Surgeon J. B., M.D.  
HILGOWORTH, Staff-Assistent-Surgeon J. A.  
IRONBIDE, Assistant-Surgeon W. M. D., 71st Foot.  
JAYNE, Assistant-Surgeon G. N., M.D., 79th Foot.  
JARDINE, Assistant-Surgeon J. B., 59th Foot.  
JOYNER, Assistant-Surgeon J. S., 80th Foot.  
KENNEDY, Staff-Assistent-Surgeon F.  
MACARTHUR, Staff-Assistent-Surgeon T. A. C.  
MCLEISH, Assistant-Surgeon A. C., 10th Foot.  
MACNEILL, Assistant-Surgeon I., 1st Foot.  
O'NEILL, Staff-Assistent-Surgeon J. H.  
POPE, Assistant-Surgeon J. J., 72nd Foot.

QUINTON, Staff-Assistant-Surgeon W. W., M.D.  
 ROYLE, Assistant-Surgeon A., 11th Foot.  
 SCOTT, Staff-Assistant-Surgeon J. A.  
 SIMON, Staff-Assistant-Surgeon G., M.D.  
 WALTER, Assistant-Surgeon W. P., 1st Foot.  
 WHITE, Assistant-Surgeon R., 23rd Foot.  
 WHITE, Assistant-Surgeon T. H., M.D., 6th Foot.

#### ROYAL NAVY.

CRAWFORD, William, Esq., Surgeon-Superintendent to the *Recluse*, convict-ship.  
 DUNCAN, George, M.D., Surgeon, to the *Ida*.  
 LUCAS, Leonard, Esq., Assistant-Surgeon (Additional), to the *Royal Adelaide*.

#### VOLUNTEERS. (A.V.= Artillery Volunteers; R.V.= Rifle Volunteers).—

BARNES, G., Esq., to be Assistant-Surgeon 1st Administrative Battalion Staff Reserve R.V.  
 HUGHES, J. R., Esq., to be Honorary Assistant-Surgeon 3rd Denbighshire R.V.  
 JONES, G. T., Esq., to be Surgeon 1st Administrative Battalion Denbighshire R.V.  
 KEITH, A. D., Esq., to be Honorary Assistant-Surgeon 21st Aberdeenshire R.V.  
 WALKER, J., Esq., to be Assistant-Surgeon 1st Administrative Battalion Staffordshire R.V.

#### BIRTH.

HEWITT. On September 14th, at Winkfield, near Windsor, the wife of T. S. Hewitt, M.D., of a son.

**BIRMINGHAM GENERAL HOSPITAL.** The Chairman of the Birmingham Musical Festival Committee has handed over to the weekly board of the hospital the sum of £3000, being the first instalment of the proceeds of the musical festival recently held in aid of the funds of the hospital.

**ADULTERATION OF PEPPER.** There is reason to believe that pepper is still adulterated extensively. Of thirty samples of pepper lately analysed by Mr. Phillips, only twelve were genuine and eighteen adulterated, the adulterants being the starch and husks of rice, wheat starch, linseed meal, and in one instance ground pine wood.

**ADULTERATION OF SNUFF.** The law permits the use of lime water in the manufacture of high-dried snuffs, that is, of a perfectly clear solution of lime. Many manufacturers, however, use a thick mixture of undissolved lime and water. The vicious form of adulteration is almost entirely confined to the north of Ireland, where it appears the habit is very prevalent among the women employed in the linen and other factories of taking snuff highly charged with lime, and which is known as "white snuff;" and the manufacturers allege, in extenuation of their dishonest practices, that no other description of snuff is acceptable to their customers. In several samples of snuff obtained in Belfast, it was impossible to say whether lime or tobacco predominated. Some manufacturers, it is said, actually grind up dry lime with the tobacco.

**THE INDIAN ARMY.** Probably very few persons in England have an adequate appreciation of the serious difficulties and dangers with which the constitution of the Indian army threatens the future of our empire. In these days India is governed from England. No great measure is originated here; in Sir Charles Wood centres the hopes or fears of both branches of the service. He is upon the whole more dreaded than the Hindoo dreads his avenging deity, and his two last measures—the New Medical Warrant and the despatch upon the Reorganisation of the Indian Army—have filled the doctors with despair and their brother officers with consternation. There is not a regiment in the land whose officers are not thoroughly dissatisfied; and, as to the medical service, it is quite impossible that under the new rules it can ever be as efficient or as distinguished as it was of old. It is only the plain truth to say that the Indian army is deeply and thoroughly discontented. (*Times Correspondent*.)

**VALUE OF LIFE IN INDIA.** From the rate of mortality a life table has been constructed from which the mean duration of life, as well as the value of the annuities dependent on soldiers' lives in India, can be deduced. By this table it will be seen that the mean after-lifetime, or expectation of life, as it is sometimes termed, at the age of 20 in India is 17.7 years, while it is 39.5 years in England; so that life is shortened by more than 21 years by residence in the former country. The after-lifetime at the age of 40 is 15 years in accordance with the Indian, 26 in accordance with the English table.

**DR. EDMONDS' VENTILATION OF SHIPS.** A trial was made the other day at Portsmouth of the ventilating apparatus which has been adopted on board the screw three-decker *Victoria*. The arrangements are those recommended by Staff-Surgeon Dr. Edmonds, of Her Majesty's ship *Victory*, and have been carried out under that gentleman's supervision. "It was ascertained that half a million cubic feet of the foulest air of the ship were constantly being carried off by the apparatus through the funnel draught while the fires were lighted. With the fires unlighted about one-third the amount of air is carried off through the funnel." In the case of the *Royal Sovereign* turret ship, which has also been ventilated upon the plan of Dr. Edmonds, it was found on the experimental trip, that, "on measuring the strength of the current of air which was passing up from the vessel's hold and bilges by the air-shafting into the funnel it was discovered to be moving at the rate of 31 feet per second, equal to 225,000 cubic feet per hour.

**SUCCESSFUL LIGATURE OF THE ARTERIA INNOMINATA.** Dr. Rogers of New Orleans, in a letter to Dr. Mott of Philadelphia, describes a successful case of ligature of the innominate artery, performed by Dr. Smith of the Charity Hospital of New Orleans, during the present year. The subject was a mulatto man, 33 years of age. He had a large aneurismal tumour, with a strong pulsation. On May 15th, Dr. Smith applied a ligature to the arteria innominata and to the right carotid about one inch above its origin, as proposed by Dr. Rogers in 1849. The wound was dressed in the usual manner, and the man removed to bed. On May 28th, the ligature came from the carotid artery; and the next day there was some hæmorrhage from the wound, but it was arrested by slight pressure. It returned on each of the following three days; and on June 1st, Dr. Smith removed the lint, and filled the wound with small shot. On June 2nd, the ligature was separated from the arteria innominata. On June 17th, a part of the shot was removed from the wound; but this was followed in a few hours by hæmorrhage, and the shot was returned. On July 5th and 8th, the hæmorrhage returned. It being thought that the hæmorrhage must be supplied by the vertebral artery, through the subclavian, Dr. Smith secured the vertebral artery on the 9th of July. On July 19th, there had been no return of hæmorrhage. The ligature separated from the vertebral artery this day. A doubtful pulsation could be felt in the right radial artery. The aneurismal tumour had disappeared. On July 30th, the general health had much improved since the last report. The wound was nearly closed. He walked about the ward, and was desirous of returning to his home. There was every reason to believe the operation to be in every respect a success. On this case, Dr. Mott remarks: "I have expressed myself to my class for many years past, that I would like to live long enough to see the innominate successfully tied for aneurism. For this surgical achievement I am more than gratified—I am delighted. On the brow of Dr. A. W. Smith of New Orleans will always rest the



laurel of the first successful operation of ligature of this great artery. Time never can rob him of this surgical achievement."

EDINBURGH UNIVERSITY. Professor Balfour, in his address to the new graduates on August 1st, said: "In the military and naval services, and in our colonies, eminence in science has raised graduates (of the Edinburgh University) in several instances to places of high responsibility and emolument. Some of the most important recent scientific expeditions owe much of their value to Edinburgh Doctors of Medicine. Among these may be noticed Dr. Balfour Baikie, who has superintended the exploration of Western Africa; Dr. Hector, who acted as geologist in Paliser's expedition to the Rocky Mountains, and who is now engaged in valuable geological researches in New Zealand; Dr. John Kirk, who acted as medical man and naturalist to the Livingstone expedition; Dr. Thomas Anderson, now filling with the highest credit the office of superintendent of the Botanic Garden of Calcutta; Dr. Birdwood, filling a similar office at Bombay; Dr. Cleghorn, conducting the forest department in the North-Western Provinces of India; Dr. Alexander Hunter, ably conducting the School of Design at Madras, and the Horticultural Garden there; Dr. Aitchison, advancing the knowledge of Indian botany by his researches; Dr. Wallich, publishing valuable treatises on the lower forms of animal and plant life; and many others who are doing credit to their Alma Mater."

A WINTER JOURNEY. The annual reports just issued from the army medical department comprise one from Dr. Muir, inspector-general of hospitals, on the overland transport of British troops to Canada in the winter of 1861-2, on the occurrence of the Trent affair. The weather was on the whole unusually mild. Several medical officers note the thermometer as having touched the low figure of 25°; but, as there was little wind at these times, the effects of so intense a cold were, comparatively, little felt. The health of the men was excellent. Of a force of nearly 7,000, not more than seventy claimed admittance into the hospitals *en route*, and nearly all eventually returned to duty. Excluding two fatal cases directly attributable to excess in drinking, only two men died—one from pneumonia through hard drinking, and one from enteritis. Eleven cases of frost-bite occurred, but only one man was seriously injured—both his hands required amputation. Of the seven cases of pneumonia all got well with the exception of the fatal case just mentioned. The other affections were trifling attacks of diarrhoea, occasioned by drinking, to which not a few gave themselves up when they had the opportunity. Such a journey in midwinter was an operation of some peril, and called for forethought and sanitary precaution; but the arrangements were eminently successful. Dear-bought experience bore its fruit; our military organisation was proved equal to the sudden strain, and the men were placed in Canada with rapidity, in excellent condition and fit for taking the field.

MUSHROOMS. Enormous quantities of mushrooms have been gathered in Devonshire this season, which is accounted for by the long drought and the rains following upon it. People generally look upon mushrooms as a sort of luxury, and not as an actual article of food. The inhabitants of Italy, France, Germany, and Russia use large quantities of various species rejected by us as articles of food. In the Italian market, there is a regular inspector, whose business it is to look over the various lots brought into the market. Dr. Badham has written a treatise on the edible species indigenous to this country, and he has enumerated upwards of thirty species that might be used as

articles of food. As a nutritious article of food, the mushroom, perhaps, yields to none of the higher forms of the vegetable kingdom. Of all vegetable productions they come nearer in their chemical composition to the flesh of animals than any other of the vegetable kingdom. If more attention were paid to these lowly forms of the vegetable kingdom many a good meal might be obtained by those who now feel the pinch, or want a dinner. The aggregate number of fungi, so far as is at present known to inhabit the British Isles, is about 2,400 species.

LIABILITY OF CLUB-PATIENTS. The plaintiff, a surgeon living at Pahrán, sued the defendant for the sum of £10:10, for professional services. Payment of the claim was resisted on the ground that the plaintiff being the medical officer of No 6, Oddfellows' Lodge, Pahrán, of which the defendant is a member, the latter was entitled to be attended in terms of the contract existing between plaintiff and the lodge. It was admitted that under ordinary circumstances such was the case, but it was contended that as the defendant received his injuries whilst in a state of intoxication, he thereby forfeited the right which he would have otherwise possessed. This view of the case was taken by the judge, who gave a verdict for the amount claimed, with three guineas costs. (*Australian Medical Journal*.)

EXTRAORDINARY CASE. Before the Lincoln County Court, Dr. W. O'Neil, a physician, brought an action against Mr. T. W. Pauli, to recover the sum of three guineas as compensation for loss occasioned by his being made the subject of a hoax. On August 18th last, Dr. O'Neil received a letter, purporting to be from Mr. J. Parker, of Fulbeck, a village fourteen miles from Lincoln, asking Dr. O'Neil to visit his wife, who was seriously ill. The doctor went over to Fulbeck, but found that no such person existed there. He came to the conclusion that he had been hoaxed. After riding about fifty miles, and spending eight hours in his bootless journey, the doctor returned to Lincoln, and on carefully scrutinising the letter it struck him that it was in the handwriting of the defendant. Several friends were of the same opinion. Dr. O'Neil placed the matter in the hands of his solicitor, who wrote to the defendant, stating that if three guineas, the amount of expenses incurred, were not paid, and an apology made, legal proceedings would be commenced against him. The defendant replied by denying the authorship of the letter in most indignant terms. The letter was produced on the part of the plaintiff, as was also another written by the defendant relative to a business matter. A number of witnesses were examined, all of whom were of opinion that the handwriting was the same in both letters. For the defence a dozen witnesses, one of whom had dispensed medicine for several years for Mr. Pauli, swore distinctly that the letter was not in the defendant's handwriting; and on Mr. Pauli being called into the box, he swore that he was not the writer, and was totally ignorant of its being sent. The jury (composed of five tradesmen of the city) returned a verdict for the plaintiff—damages, three guineas.

HEALTH OF THE ARMY ABROAD. The returns which have been issued from the Army Medical Department relating to the health of the army in 1862 present a very encouraging result:—Admission into hospital, 1,736 per 1,000 of mean strength; deaths, 25.68 per 1,000, the deaths being nearly a third under the proportion of 1861. The mortality in the Madras Presidency was 20.83 per 1,000; Bombay, 24.60; and Bengal (where the majority of the troops are quartered), 27.55, the Bengal mortality of 1860 and 1861 having

averaged 42.27. These statements include the deaths of invalids on their passage home, or while waiting their discharge in England. There were no less than 96 cases of sunstroke, or heat apoplexy, and 30 terminated fatally. The number of invalids sent home in the year for discharge or change of climate was 1,795, being 28.17 per 1,000 of mean strength. The return of deaths at each age shows a much more rapidly progressive increase of mortality in India with the advance of age than is usual in temperate climates. In 1862 the deaths from spasmodic cholera in Bengal were only a third of the ratio of 1861, but it still remains the chief cause of mortality, its fatal character having undergone no modification. Of the European troops employed in China in 1862, we find an average strength of 3,511, admissions into hospital 1,847 per 1,000, and deaths no less than 99.12, literally decimating the force. This is due chiefly to the returns from North China; in South China the ratio was 28.78. At Shanghai, the deaths were 163 per 1,000, a fearful rate of mortality, due in nearly equal proportions to epidemic cholera and to dysentery and diarrhoea. The surgeons are not sanguine of its ever proving a healthy station. It is estimated that between Shanghai and Seon-Kiang, distant some 40 miles, about an eighth of the Chinese population died from cholera in 1862. In New Zealand, the average strength was 5,482, admissions into hospital 546 per 1,000, deaths 9.10. Mr. Mouat, Deputy Inspector-General of hospitals, notices the comparative absence of some diseases, as venereal and malarious fever, and the entire absence of others, such as small-pox and cholera; he considers that with improvements (much required) in barracks, a proper check upon intemperance, and an allowance of four consecutive nights in bed, the mortality might be reduced one half. In Australia the average strength was 1,000, admissions into hospital 685, and deaths 22. The Australian climate was not well suited to persons having a tendency to tubercular disease. In Ceylon also tubercular diseases were a source of considerable mortality. In Mauritius the deaths rose to nearly 44 per 1,000, owing to the prevalence of epidemic cholera. The chief cause of the invaliding, which was much above the average of the three preceding years, was pulmonary disease. At the Cape of Good Hope the average strength was 4,519, the mortality 9.37 per 1,000, just 1 per 1,000 above that of the army at home in the same year; more than 20 men per 1,000 were in hospital for diseases directly resulting from intemperance. From the West Indies the mortality return from Jamaica, 12.81 per 1,000, is favourable, but in the Windward and Leeward command the deaths were 13.10 per 1,000, which is considerably higher than in the previous year owing to an outbreak of yellow fever at Barbadoes. From Canada the return is favourable—admissions into hospital 667 per 1,000, and deaths 8.36. The admissions into hospital were chiefly from venereal disease or the consequence of intemperance. At Malta venereal disease was reduced more than half, owing to the adoption of a system of police surveillance of the loose women. At Gibraltar the sickness and mortality were lower than in the army at home, but continued fevers were in excess of the average. They are attributed to the continuance of imperfect drainage, overcrowding, intemperance, and exposure to the heat of the sun on the public works. Mr. Paynter, Deputy Inspector-General of hospitals, believes intemperance to have been the source of two-thirds of the diseases which came under treatment. In the whole army at home and abroad in the year 1862 the admissions into hospital amounted to 1,165 per 1,000 of mean strength, the deaths to 16.38, and the discharges by invaliding to 26.13.

## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.  
TUESDAY....Guy's, 1 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
SATURDAY....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

## TO CORRESPONDENTS

\* \* \* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

F. A.—To ask the question: "Is medicine a profession for a gentleman?" is certainly something the same as asking: "Are there any gentlemen in the profession?"

MEASUREMENTS OF THE FEMALE PELVIS.—The measurements of the female pelvis of the model skeleton in the Museum of the College of Surgeons, are: Brim of pelvis, antero-posterior, 4.5 in.; transverse, 5.9 in.; width of inferior outlet, 4.7 in.; greatest width of ilia, 11.5 in.; greatest width of ischial tuberosities, 6 in.; height, 7.9 in.

THE QUACK NUISANCE.—(E. D.)—Anybody in this country may practise either medicine or surgery, so long as he does not use certain titles; and we believe there is no power in the law to prevent a man putting "Dr." before his name. We are not aware of the existence at the present time of any Medical Protection Society to meet such cases by prosecution: but we would recommend our correspondent to apply to Mr. Talley, solicitor, of Beaconsfield, who, we learn, is taking measures for fairly testing the powers of the Medical Act against offenders.

MR. THOMAS CHARLES (Sydney).—Your letter and enclosure have been safely received by Mr. Honeyman.

IN THE SOCIAL SCIENCE REVIEW of August, Dr. E. Smith has a paper on Gaol Dietary. Also, we find the following: Notes on the Basque Provinces; Agricultural Capacity of the United Kingdom; Education in Trieste; Working Men's Clubs; and Cash *versus* Credit.

SIR: Will you be good enough to answer the following query?

I am, etc., L.R.C.P.LOND.  
"If L.R.C.P., not being M.D., can call himself physician and not doctor, can M.D., who is a doctor, call himself a physician, without a diploma from the College of Physicians?"

[All we can say is, that a Doctor of Medicine is not a member of a College of Physicians unless he take the College License. What men can do at the present time and what men ought not to do, and what they do in the matter of assumption of titles, and what they ought to do, are questions quite beyond us to decide. Certainly, according to *lex talionis*, if a physician take the title of doctor, the doctor might lay equal claim to the title of physician. EDITOR.]

COMMUNICATIONS have been received from:—Dr. WILLIAM EDDY, Dr. T. HILLIER, Mr. BREMER, Mr. CARTER, Mr. HENRY LEE, Dr. MAUDSLEY, Dr. JOHN THOMPSON, Mr. A. B. BOULAND, Mr. THOMAS POPE, Mr. L. HARRISON, Dr. FREDERICK J. BROWN, Mr. J. VOSE, LONDON; Dr. THOS. INMAN; Mr. OLIVER PEMBERTON; Mr. J. GARDNER; Mr. T. CHARLES; Mr. S. B. PARTRIDGE; and Dr. G. A. PHILLIPS.



# President's Address

IN THE

PUBLIC HEALTH DEPARTMENT OF THE  
SOCIAL SCIENCE ASSOCIATION.*Delivered at York, September 1864.*

BY

SIR CHARLES HASTINGS, M.D., D.C.L.

WHEN I accepted the honourable position proffered to me by your Council, I did so with a full conviction that I should meet from this assembly a kind reception, and that, however far I may fall short of my distinguished predecessors, I shall receive an indulgent criticism at your hands.

The question of Public Health is so large, and branches off into so many and intricate paths, that I should in vain attempt to draw your attention to the whole subject; and I feel grateful for the arrangement which in this, as in the other Departments, has pointed out certain special questions for discussion.

We will first glance at some general principles. Sanitary science, in an extended sense, must be regarded as considering the constitution of man in reference to external objects. It has been wisely said, "that physical laws of nature, affecting our physical condition as well as regulating the whole material system of the universe, are universally acknowledged to exist, and constitute the elements of natural philosophy and chemical science.... Accordingly, the laws of nature have formed an interesting subject of inquiry to philosophers of all ages, however few may be those who have attempted to point out in a systematic form the relations between those laws and the constitution of man, which nevertheless must be done before our knowledge of them can be beneficially applied." In looking back on what has been done by the Association in this branch of its labours, it must be admitted that these views are in harmony with the recorded proceedings of our Department. Its presidents have, in their addresses to the members, successfully and eloquently pointed out the necessity of studying the organic laws in every attempt to improve the health of the community: nay more, that it should be alike our duty and our highest pleasure to show the beneficence of the Creator, who made the eye for seeing, the ear for hearing, and the brain for the manifestation of intelligence and will; and to prove to a world, which has too much neglected or utterly ignored the fact, that the laws of bodily are those of mental health. I consider it to be the sacred mission of this Association to impress upon the body politic these enlightened views; for be assured that, the more we can procure their practical adoption among communities of men, especially in large towns, the more we shall succeed in the chief end for which our society was called into existence—the improvement of the condition of the people.

With this aim steadily before us, it is matter of congratulation that the Council have set forth, for consideration at this meeting, some problems intimately connected with the progress of sanitary science: the three subjects so pointed out being: The best mode of disposing of the sewage of towns; the causes of, and the means of preventing, excessive mortality among infants; and the influence on health of the over-crowded dwellings of the working classes.

Nothing can be more certain than that the mortality of towns is greatly increased by the imperfection of the means for disposing of their sewage, and that a satisfactory solution of this question is a desideratum of great importance. Hitherto, the growth of a fresh evil has been in too many cases coincident with the increase of town-drainage. The sewage thus collected has been heedlessly cast into rivers, to pollute their waters, to destroy one source of food-supply in their swarms of fish, and to convert the healthful stream into an impure ditch. Such, as many can testify, is the condition of the rivulets in our manufacturing districts; such, in a degree, is the condition of our noblest rivers. The state of the Thames has long been notorious; a gigantic effort is now being made to restore its purity; but it is a sad reflection on the economy of the age, that an expenditure of three millions of money will lead to no more satisfactory result than the daily casting of nearly ninety millions of gallons of highly fertilising matter into the sea. So, again, with that fine river the Severn; the refuse of the towns on its banks, and indeed of some far from its banks, is poured into its waters; and, as I pointed out in a contribution which I had the honour to make to the Association at the Birmingham meeting, and which was subsequently printed in the *Transactions*, the river is thus poisoned and made unfit for the supply of pure water to the inhabitants of the districts which it traverses. A Select Committee of the House of Commons has recently collected much valuable information, and has made some useful suggestions on the subject; we have heard at this meeting, from Mr. Rawlinson and others well qualified to speak on the question, the latest results of scientific investigations. It seems capable of demonstration, that the application of town sewage to land may be made peculiarly profitable; and I trust that the discussion which has taken place may lead to the adoption of some practical plan by which the improved health of the community, and the renovation of the producing vigour of the land, may be alike secured. In this respect, as I believe in many others, it will be found that health and wealth go hand in hand, and that science is the parent of economy.

The revelations that have been made in the returns of the Registrar-General, and the results of recent laborious investigation in large towns on the subject of infant mortality, are absolutely appalling. This mortality cannot be said to be peculiar to any state of society, for it exists under circumstances most dissimilar in our urban and rural population. True it is, that it is found in its most serious form in our large towns; but the returns of the Registrar-General, and the able Report lately presented by Mr. Simon to the Privy Council, show that, under conditions not yet fully determined, infant mortality is very high in rural districts. It will require much patient labour on this question to eliminate all sources of erroneous calculation, so as to arrive at the exact truth, and to draw safe deductions therefrom. In the meantime, it is clear that in our large towns potent agencies are ever at work, to which much of the deadly destruction may be charged. First among these is the over-crowded state of dwelling-houses; but, as I shall have to allude to this subject under another head, I will now only say that the impure air of crowded, badly ventilated, and badly drained dwellings is singularly inimical to young life; for, during the earlier period of human existence, a free supply of oxygen is of peculiar consequence to carry on healthily the vital functions. Then, again, the poor form a large proportion of almost all communities; and a deficient supply of nutriment to the infant is the frequent consequence

of the want by the parents of the necessities of life. Thus sickly and fragile children are produced; and it is found that the ordinary epidemic diseases, to which all infants are more or less liable, fall upon these feeble beings with great severity. Many succumb to their influence; and those who survive grow up a debilitated race, and never bring the full quota of health to the life of their generation. Of these diseases, scarlatina is peculiarly destructive. Considering the progress of sanitary science, it is mortifying to reflect that within the last year we have had to deplore a serious loss of young life in many parts of the kingdom from this epidemic. Its prevalence in towns where great attention has been paid to drainage, and where the water-supply has been improved, shows that we have not yet solved the problem of preserving infant life from such visitations, and that every stimulus ought to be given to inquiry into the obscure working of these subtle agencies on the human frame in its early period of development.\*

Perhaps there is no view of society more disheartening than that which is afforded by the facts lately brought to light respecting the murderous destruction of infant life. A return has been made to the House of Commons, by which it appears that no less than 22,757 inquests were held in the course of last year upon persons who had come to their death in some violent or unusual manner. But it is in respect to infants that these returns are most deplorable. Nearly one-third of the number of inquests—or 6506—were held upon infants under seven years old, of whom over 1100 were illegitimate. There were held 3644 inquests on children under a year old, and of these nearly 1000 were illegitimate. There can be no doubt that the crime of infanticide is of frightful prevalence, especially when the marriage tie does not throw its consecrating protection over the mother. With such a gigantic evil how are we to contend? That attempts should be made to diminish it, I think few will deny; for, although we cannot eradicate the crime, we may check its growth. The public meeting over which Dr. Lankester presided some time ago, at the Freemasons' Tavern, was a move in the right direction; and let us hope that some preventive measures may soon be adopted.

I pass to the third question contained in our programme—What is the influence on health of the overcrowded dwellings inhabited by the working classes? The reply to this inquiry is of paramount importance. Over-crowding is not confined to the inhabitants of towns: it exists to a great extent in the rural, as well as in the urban districts, and is in each case a pregnant source of disease. There is no doubt that its effects are most conspicuous in towns; for there the atmosphere surrounding the habitations is, as a general rule, more polluted than in the country; but the cottages in country districts are often so overcrowded, that less than 100 cubic feet of air is allotted to each inhabitant; and when any epidemic visitation appears in such localities, a higher rate of mortality is caused, especially among the young.

Perhaps, of all the questions relative to the improvement in towns, that of over-crowding is most difficult of solution. In London, great efforts have been made, and are now in progress, to diminish the evil; but it still prevails to an alarming and dangerous extent, and calls aloud for the application of such remedial measures as may be possible. The

misfortune is, that the diminution of the evil in one part of the town has a tendency to increase it in another. Thus the destruction of old streets and the formation of new not unfrequently has the effect of forcing the working people into habitations more crowded and more objectionable than those that they have left. This, however, should not stop the progress of improvement, but should stimulate to further effort to dispose of the population thus dispersed.

Model lodging-houses have in many instances been erected, to set an example of improvement, and to show how much the health of the worst localities can be improved. But, unless the municipal authorities in our towns can be convinced that it is their duty to take the lead in this movement, it is not probable that anything adequate to the extent of the evil will be achieved. Such rare munificence as that of Mr. Peabody is not likely to find many imitators; and, although in some instances model lodging-houses have succeeded in a pecuniary sense, yet, generally speaking, no such return on the capital invested as will tempt private enterprise has been realised from these undertakings. Full information on this subject will be found in the valuable papers contributed, on more than one occasion, by Mr. Henry Roberts, to the *Transactions* of this Association.

In the city of Worcester, where I have exercised the profession of medicine for half a century, I can produce, on a small scale, a striking illustration. More than ten years ago, an association was formed to build model lodgings in one of the lowest and most degraded parts of the city, where there was a squalid population, with a death-rate of not less than twenty-three or twenty-four in a thousand. The old houses were cleared away; and in their place a rather handsome pile of buildings was erected, and the internal arrangements of some of the London model lodgings were copied. It is gratifying, at the end of ten years, to be enabled to say that great success, in one point of view, has attended the experiment. A most decent set of inhabitants, belonging to the working classes, tenant the houses, and form an agreeable contrast to the former inhabitants. The sanitary result is highly encouraging. During the last five years, in a population of about 140 men, women, and children, of the artisan class, occupying thirty-four houses, there have not been more than eight deaths; thus reducing the rate to sixteen in a thousand. It is also worthy of note that, whilst Worcester, from the month of November 1863 to the month of May 1864, was visited by a severe epidemic scarlatina, attended by a high rate of mortality, only one death from this cause occurred in the model lodgings. The financial result is less satisfactory; for although the houses have been well let, the pecuniary return has not been hitherto such as to make it a remunerative investment for capital, two per cent. having been the best rate of interest realised. I see no reason, however, why the experiment should not succeed financially, if the authorities would take the lead in the matter, and carry out the improvements cautiously and judiciously, by altering, amending, and cleansing old buildings, and adding to them all the modern appliances, rather than by removing them altogether, and erecting new ones in their stead.

Before quitting this subject, I may observe that the spread of epidemic fever is greatly aided by overcrowding and want of ventilation in houses. Perhaps, of all causes, this has most to do with incubating and diffusing those continued fevers, which are known as inflammatory or relapsing fever, typhus, enteric, and gastric fever. Concurrent experience seems to show that by diminution of the numbers in

\* It is a subject for consideration, how far the mortality from epidemic disease might be lessened by the establishment of children's hospitals. Many lives might be saved if, on the first appearance of scarlatina in a community, the children were quickly removed out of their crowded and unhealthy dwellings to well-ventilated hospitals.



a given space, so as to obtain pure air, and by free ventilation, you stay the progress of these diseases. It is by these means especially, that model lodging-houses have been instrumental in diminishing the death-rate of crowded localities; though, no doubt, improved drainage and water supply have acted powerfully in the same direction. A forcible illustration may be seen in the results of the improved sanitary arrangements in our prisons. In the year 1783, as I shall have further occasion to mention, a severe outbreak of fever took place in the county gaol of Worcester; while in 1863, when a fatal epidemic scarlatina raged in that city, not a single case occurred in the prison; showing conclusively that, under proper hygienic conditions, a barrier may be opposed to the inroads of infectious disease.

It is, however, not less certain that alterations of the soil and surface of a country are influential in modifying the character and abating the prevalence of particular diseases of the febrile type. My distinguished predecessor, Professor Christison, alluded last year to the alteration of the type of disease, more especially in Scotland, through the disappearance of intermittent fever or ague. This fact he was enabled to prove in a satisfactory manner from the dispensary records at Kelso, which show that the agues appear in these records from 1777 to 1806, after which they disappear from the books. Now, it is certain that in England many districts were subject to ague about the same period of time; and equally certain that for more than half a century they have been free from it. The Worcester Infirmary was founded in the year 1745; and I have discovered, by consulting the records of that institution, that, during the latter half of the last century, cases of ague were very frequently admitted; but the disease disappears from the books about the year 1800; and I can state positively that, since 1812, in which year I became connected with the hospital, and have continued so, more or less intimately, down to the present time, scarcely a case of ague has occurred in the district. As far as my own practice goes, the few cases I have had to treat in Worcestershire during the last half-century have been imported into the county. Here we have a change of type in disease; and the question is, how it has been brought about. The common solution is, that the country has been drained, and that ague has consequently ceased. To this, Professor Christison demurs; and denies that drainage had been effected to any considerable extent in Roxburghshire till long after ague had disappeared from Scotland. He seems to draw the conclusion, that this change of type in disease was not owing to the improved drainage of the country.

Now, whatever may have been the case in Scotland, I am in a condition to prove that a very great alteration of the soil and surface of the county of Worcester took place in the latter part of the last century. The chase of Malvern was, up to a comparatively recent period, a royal forest; and, as it was situated in the vale of the Severn, and liable to be inundated, its rank vegetation would be likely to produce miasma of an active kind; a sufficient cause at once for the prevalence of ague. Towards the end of the last century, nearly the whole of this chase, which contained many hundred acres of land, was enclosed. The effect of this enclosure, and of the cultivation of the soil, was considerably to alter the surface of the country, and to make the land drier. There was not, and, any such scientific drainage as is now practised, with so much advantage to agriculture; but the general effect of ploughing, of making water-courses have their effect, and the substitution of serial crops for continuous vegetation, must have had a great effect in re-  
through water from the surface of the land, and in

diminishing miasmatic exhalations. So that, as regards Worcestershire, the disappearance of ague seems to be accounted for by its being coincident with a very material diminution of the causes which are known to produce the disease.

The alteration of the type of disease in Worcestershire is not confined to intermittent fever; but I think, to some degree, an equally satisfactory explanation can be given of other changes. On studying such records as exist of the fevers prevalent in the last century, it cannot be denied that they varied greatly from those of this generation. More especially is this shown by the comparative rarity of continued fevers at the present day. I can quote from a contribution by a resident practitioner in Worcester, on the various sources, symptoms, and treatment of fevers as they occurred in that city and its immediate neighbourhood, between the years 1781 and 1820. He remarks that in 1781, the city and suburbs of Worcester were much subject to fever; and if we consider the wretched state in which many of the lower classes of the inhabitants were crowded together in the remains of the former clothing manufactories; the neglected state of the streets in which these buildings were situated; that even those in the most airy parts were but partially under-drained, and that the drains were so ill-constructed as frequently to admit of their contents stagnating and infecting the air for a considerable distance round their grates; considering, also, the large quantities of water highly charged with animal matter, issuing continually from the glove manufactories, we feel no surprise that idiopathic fevers did, during this time, frequently and generally prevail in Worcester.

The severity of these visitations may be estimated by the fact stated by the same authority, that an epidemic fever, in 1783, lasted for eight months, during which time he attended seventy cases in the county prison, of which number thirteen died. There appears to be no doubt that these frequent scourges induced the inhabitants to make efforts to better the condition of the poorer people by cleansing the streets and improving the houses; and that these efforts were followed by a diminution of disease. In the year 1812, when my medical connection with the neighbourhood commenced, typhus and enteric fevers were of milder type and less frequent, though severe cases of typhoid fevers were still not unfrequently admitted into the infirmary. And so matters continued till the year 1832. In that year, came the first outbreak of cholera, when the whole city and county were seized with alarm as to the probable effect of the visitation. The calamity was met by the city with wisdom and firmness, and vast improvements resulted. The houses were cleaned, the streets were better drained, and much was done to better the condition of the labouring classes. My conviction is that, from that time, the health of Worcester, as respects epidemic fever, has been materially improved; and I may state that, during the last twenty years of my attendance as ordinary physician at the Worcester Infirmary, I very rarely admitted a case of fever. Nor can I doubt that this comparative immunity from continued fever, and the diminished severity of its type, must be attributed to the better habitations of the labouring classes, and to the improved drainage and water-supply which within the last few years have been obtained by a great but assuredly a highly remunerative expenditure.

Yet much remains to be done. During the last year we have had an admonition that Worcester is not safe from outbreaks of scarlet fever. That terrible disease began to rage in October 1863, and continued its ravages in the city and suburbs until the summer of the present year. The mortality, which was greatest

among children under twelve years of age, reached as high as 250, in a population, according to the census of 1861, of 32,802. Such a loss of life forces on us the question—How is it that, in a community where several sanitary improvements have been effected, and where the occurrence of the ordinary continued fevers has been so considerably diminished, such an outbreak of disease can take place? The question is important, and applies more or less to the whole country; the case of Worcester, which I have taken as an example, being the case of many other towns. The answer is twofold. In the first place, the ordinary sanitary improvements which may be effective in lessening the fatality and frequency of fevers less intensely infectious, fail to stop the progress of scarlet-fever. This may arise from the activity of the poison productive of that disease, and which is generated profusely by every person attacked, contaminating the air around him, and endangering the individuals with whom he comes into communication.\* It is clear that some active measures of a preventive character would have a salutary effect. When the cholera visited Worcester in 1832, the inhabitants were so alarmed that stringent means were promptly taken by the public to meet the danger. In every place where the disease appeared, the houses were purified; the persons attacked were removed to a hospital, and the crowded dwellings were emptied of their inhabitants, who were placed in temporary habitations erected for the purpose.

Yet the cholera of 1832, which was thought terrible enough to produce these exertions, killed fewer people in Worcester than did the scarlet-fever of 1863. I do not say that the same plan could be always carried out for the prevention of scarlet-fever, but the check given to the spread of cholera by the vigorous efforts I have described, points to the establishment of some system of medical police by which persons labouring under infectious disease, may be prevented from disseminating the poison throughout the community. But in the second place, much must be added to the ordinary sanitary improvements before any charge of failure can be made against the science of health. Houses must be well ventilated, and overcrowding be avoided; the means of cleanliness by baths and wash-houses must be provided for every citizen; and above all, perhaps, an effective house-drainage must be applied, to make the main sewers of real use. It seems to me idle to point to the continuance of fever in towns where cesspools and middensteads are allowed to collect impurities. Such towns are not in a sanitary condition, and must expect the visitations of disease. However beautiful their situation, and imposing their architecture—nay, whatever their expenditure on sanitary measures, such cities are but whitened sepulchres, hiding, under a fair exterior, the rottenness and corruption of death.

It is possible that the day may come when, as in small-pox, a mild disease may be substituted for scarlet-fever; and some continental physicians have

brought forward facts which, if duly authenticated, would render it even probable. But were such a discovery assured, it is to be feared, should the community at large remain as ignorant of physiological laws as at present, that great indifference would be manifested as to the utilisation of the benefit. The history of vaccination and of the opposition made to its general introduction among our population, is a striking proof of the obstinate adherence to preconceived notions created by uninformed prejudice. If we figure to ourselves the dreadful ravages of small-pox in the last century, and then reflect on the brilliant yet simple discovery of Jenner, by which the disease was robbed of its terrors, we must be filled with astonishment that, sixty years afterwards, the country in which the life-giving knowledge was made public, should have failed to realise all the advantages of its adoption. The mortality from small-pox is no doubt greatly diminished; but it is still considerable, and this, in a great degree, from the ignorance and apathy too much prevailing on the subject.

The protection of vaccination is accepted by only a portion of the community, and that a smaller proportion than in many other civilised states, so that the British Isles are deriving less advantage from the genius of their immortal countryman than are the inhabitants of other lands. The same remark applies to our colonies, as is seen from the occurrence of small-pox among our troops stationed in various parts of Her Majesty's dominions. It appears from an elaborate paper on the results of revaccination in the British army as compared with continental armies, lately read before the Epidemiological Society, that no portion of the empire is exempt from the scourge. From Canada to the Mediterranean, from the West Indies to Sierra Leone, and from the Cape of Good Hope to India and China, the same tale is to be heard of small-pox prevalent among the civil populations, and of more or less disease among the troops in consequence.

Among the causes which operate to produce this lamentable state of things, the following seem to be the chief.

i. The carelessness and want of foresight of a large number of the population, who seldom think of providing against the evils of a future day, and when small-pox is not prevalent, neglect to vaccinate their children.

ii. The prejudices of a few who persist in believing that vaccination is injurious; who ignore the plain proofs of the enormous benefits it has conferred, and who therefore refuse to have their children vaccinated.

iii. The insufficient payment of public vaccinators under the Poor-Law Act; the fee usually paid being so low that it fails to induce them to seek out children who have not been vaccinated; so that they consequently only vaccinate the children brought to them.

iv. The want of a duly authorised medical officer to see that the provisions of the Vaccination Act are properly carried out. Great irregularities consequently occur, especially in the issue and returns of the certificates of vaccination.

v. The want of a more complete registration of births. Many children are born who are not registered, and it becomes impossible to give the notice for vaccination.

vi. A general aversion on the part of the public legislation in a matter which they believe to involve interference with their natural rights. This feeling however praiseworthy and useful in some cases when acting in the wrong direction, fatal to all, binned action for the civilisation of man, which race that many individual rights shall be given up in benefit of the community. This feeling no ists among the poorer classes of the popu'

\* Dr. Murchison, in his Lectures, justly states that scarlet-fever depends upon a peculiar poison capable of being communicated by the sick to persons in health. This it is which explains its frequent visitation to rural districts, where the causes producing zymotic disease do not appear to be very operative. A remarkable instance occurred in the neighbourhood of Worcester during the late epidemic. The parish of Martley has an exclusively rural population, with an ordinary mortality of about 21 per 1000. There are no special circumstances in the locality which appear likely to produce zymotic disease. In the month of December 1863, scarlet-fever was imported into the parish by a tailor, whose business called him to Worcester. This was the spark to ignite the flame. The disease spread, for he lived in a dirty and ill-ventilated cottage, and his family were attacked. In a short time, fifteen children in the parish fell victims; so that in a population of 1140 persons, more than 14 per 1000 were sacrificed. The separation of the sick from the healthy, with the use of disinfectants and free ventilation, would probably have arrested the pestilence at once.



even among the wealthy and influential, and forms a serious barrier to the adequate carrying out of many sanitary measures.

Some of these obstacles in the way of the diminution, if we may not hope for the final eradication of a terrible disease, may be removed by legislation; and we ought, as far as possible, to impress on parliament the duty it has to perform in this direction. The cry of liberty of the subject ought to be scouted in every case, when the exercise of this so-called liberty endangers the lives and health of others. It is just as criminal, and calls as loudly for the interference of police authority, to spread small-pox by the exposure of persons infected, as it is to set fire to a barn or hayrick; but I fear that it is much more easy to put the law in force in the one case than in the other. Nor should the liberty of parents be recognised to put in peril the lives of their children. The law does not permit a parent to starve, or ill-use, or overwork a child; it compels proper care and maintenance; should it not also compel, and that stringently, the adoption of a safe and simple means for securing it from disease and death? Ye, I admit that in such matters the law must always be less powerful than public opinion; and it is the paramount duty of this Association to educate the popular mind, and to show the nation how deeply it is interested in the dissemination of sound views respecting zymotic diseases.\* Some people have had their faith shaken in the efficacy of vaccination, because cases occur of small-pox, after that operation has been performed. But the truth is, that such cases are likely to occur, for even small-pox itself is not a positive protection against a second attack. Let it be remembered, however, that the occurrence of the disease after vaccination is a rare event, that it is then nearly always much milder in its character, and the rate of mortality low. Moreover, we have an additional preventive in the practice of revaccination, which has been too much neglected, but is now beginning to be more generally observed, and to command the close attention of the medical profession. The experience which has been obtained seems to prove that, if vaccination and revaccination were uniformly carried out as effectively as they ought to be, the disease would become almost unknown. It is a remarkable fact that, in the Small-Pox Hospital not a single person, servant or other, has for twenty-five years past caught the malady; and this immunity is explained by the fact that every one in the establishment, without exception, is subjected to revaccination, and that care is taken that the operation should be thoroughly done, and a considerable amount of local inflammation be produced. There seems to be no reason why, in select bodies of men, like our army and navy, a similar result should not be achieved by proper vigilance, nor why, even in the population at large, small-pox should not well-nigh disappear from the bills of mortality.

It is at any rate cheering to reflect that the legislature is awakening to the duties which it has to discharge in reference to the sanitary condition of the community. Two important measures for the suppression of vice, and the preservation of health, have become law during the last session. They may both be considered in some degree tentative, and their results will form a valuable guide for any further efforts in the same direction. With respect to the first, I

may observe, that to frame laws for the partial restraint of vice, is altogether a different thing from devising schemes for its toleration. In this respect, the recent Act differs from the system adopted in other countries; since, without licensing vice, it is content to acknowledge its existence, and to impose certain penalties on those who superadd physical to moral impurity. While this great social experiment is in progress for the protection of our soldiers and sailors, regulations of scarcely less importance have by another measure been enacted in our metropolis. The Act to which Lord Brougham referred in his opening address, has established an early closing movement of a different, but not less salutary character, than that which has been long agitated. Our old friend "the liberty of the subject" is no longer to be allowed night-long revels and unrestrained profligacy, but is compelled, for his own and his neighbour's benefit, to limit his excesses to one hour beyond midnight.

Looking, then, at the great advances already made, and the many efforts that we see originated around us, we may have good hope for the future. The time will assuredly come when the laws of health will be generally known and obeyed throughout the community. None of us are likely to reach that day; but we may hasten its coming for a future generation, and even now we may see it and rejoice. Already, the average term of human life is increasing, year by year, in England and Wales, owing to better drainage, freer ventilation, a wider diffusion of the comforts of life, and greater moderation in the use of fermented liquors. Already the wisdom of John Wesley, that apostle of the last century, who said that cleanliness is next to godliness, has been practically accepted by the nation. Already the indissoluble connection between physical and moral law is admitted by most thinking men. Nor is this kingdom the only part of her Majesty's dominions in which sanitary science is being studied, and hygienic improvements carried out. Even in our Indian Empire, where the condition of nearly two hundred millions of human beings has been too long a reproach to our rule, we can see the advent of a wise policy destined to elevate a population ignorant and abject to the benefits of Western civilisation. It must be a matter of congratulation to this Association that one of our members, and one who has taken a deep interest in our proceedings, is now guiding the destinies of India. Sir John Lawrence has paid much attention to sanitary investigations; and I understand that one of the last steps he took before sailing to the scene of his viceregal labours was to obtain from the office of the Association the valuable paper of Miss Nightingale on health in India, and others bearing on the same subject. The circulation of that paper, which has just been reprinted by the Council, may have much effect on the sanitary condition of the native population, as well as of Europeans resident in the East; and it is gratifying to learn that exertions have already been made to improve the health of the presidential towns of Calcutta and Bombay. More encouraging still is it to know that many of the natives are turning their attention to these questions; and that a society of native medical practitioners, having for its object, among others, the hygienic improvement of their country, has recently been formed in Bengal. England may thus be destined to spread a knowledge of sanitary science over the globe; to set an example to other peoples of obedience to the physical laws laid down by the Almighty; and, in the words of Milton's magnificent prose, "to lead the nations in the way of life." But, whether England herself have the wisdom to walk in this way, and whether others follow or not therein, be assured that in the observance of these immutable principles the

\* The diffusion of knowledge on many matters relating to the health, has been greatly aided by the labours of the Medical Committee of the Privy Council. The reports published by the secret department (Mr. Simon) have been of much value, and I cannot but illustrate some of the obscure problems of sanitary health. The Sixth Annual Report, which has just been issued, is a conference interest, both to the public and the medical profession, referring to vaccination, the distribution of disease in the community, and other questions.

permanent prosperity of states is bound up. As the Scripture says, "God is not mocked," and His laws are not broken with impunity.

"The sword of heaven is not in haste to strike,  
But yet doth linger."

## Addresses and Papers

READ AT

### THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[JUNIOR CAMBRIDGE AUGUST 26th, 10th and 15th, 1864]

#### SOME CAUSES OF EXCESSIVE MORTALITY AFTER SURGICAL OPERATIONS.

By C. SAMUEL WELLS, F.R.C.S., Surgeon to Her Majesty's Household; to the Samaritan Hospital, etc.

MR. PRESIDENT AND GENTLEMEN,—When concluding one of the most eloquent, thoughtful, and suggestive addresses in Surgery ever delivered before this Association—after the statement that in Paris "the mortality of great operations has been diminished 10 per cent. in the last twenty years, yet that the mortality of all amputations in the Parisian hospitals is still about 50 per cent.," while at Oxford, Exeter, and Cambridge, three distinguished members of our Association have shown that instead of 50, it is only 13, 14, and 16 per cent.—Mr. Paget said: "Some of the deaths are preventable"; and added, that the mortality of great operations must be and "will be reduced, if the members of this Association will decide that it shall."

It would be very easy to add many facts to those just cited, to prove that some of the mortality after surgical operations might be avoided or prevented—in other words, that the mortality is excessive—especially in the large hospitals of large cities. A mortality of 39 per cent. after amputations in the Paris hospitals from 1836 to 1841, including amputations of the fingers and toes (the thigh 62, leg 55, arm 45, forearm 28), was, when announced by M. Malgaigne, regarded as a startling revelation. Yet M. Frelat, carrying on the researches to 1861, shows that the mortality was by no means over-rated, for 1,144 amputations in those later years gave 522 deaths, or 45 per cent. In the Glasgow Infirmary, reports of different periods give 36 and 53 per cent.; in the Edinburgh Infirmary, 50 per cent.; in the large London hospitals, 25 to 35 per cent.; and yet, in smaller provincial hospitals, it is 13, 14, and 16 per cent.

If we descend a little into detail, we find the same difference of result carried out. Separating primary from secondary amputations, we find the mortality in Paris 50, in London 22, in Massachusetts 12 per cent. Taking secondary amputation of the thigh alone, we have: Paris 60, London 21, Massachusetts 19. Take lithotomy, and we have: Paris 37, London 22, and of 222 cases in English provincial hospitals, 12 per cent. Herniotomy shows a mortality in Paris of 60, London 50, and Würzburg 43 per cent. Results so different from the same operation surely prove that in some places the mortality must be excessive, and encourage us to hope that by discovering the causes of excess we may reduce it.

All these facts having been collected in hospitals, the first and most material inquiry relates to the mortality in hospitals of different sizes. McCulloch, in his *Statistics of the British Empire*, has shown that

for every 100 cases treated in county hospitals about four died, while in the London hospitals about nine died in every 100. One most eminent medical statistical authority has recently stated that "the mortality of the sick who are treated in large general hospitals in large towns, is twice as great as the mortality of the sick who are treated in small hospitals in small towns. It remains to be seen whether the mortality in small hospitals is not twice as great as the mortality of the same diseases when they are treated in clean cottages."

However the large array of facts upon which Dr. Farr's conclusions are based may be acknowledged to bear them out fully, partially, or not at all—whatever allowance may be made for the greater severity of cases attracted to large Metropolitan hospitals by the celebrity of some of the physicians and surgeons to those institutions—however great must be the allowance made for the number of slight cases admitted in some of the smaller country hospitals, especially in the medical division, we have good reason to believe that the mortality after certain operations which must be the same wherever they are performed—such as secondary amputation and lithotomy—is much greater in large city than in small country hospitals, and that the mortality of the same operation in hospitals of the same city varies very much with the situation, size, and crowding of the hospital.

The first conclusion, therefore, is that hospitals, without being so far removed from the centres of population as to be accessible with difficulty, should be surrounded by open spaces, and should not be too large for the number of patients. And, whatever may be the size of the building, the fewer the number of floors or stories in it, the less is the probability of excessive mortality.

In the very interesting account of this town, with its university and colleges, for which we are all so much indebted to Dr. Humphry, I find the following passage:—

"Addenbrooke's Hospital, founded in 1719, by the will of Dr. John Addenbrooke, of St. Catherine's Hall, was insufficient for its purpose, and ill-constructed. It has lately, therefore, been pulled down, and is in process of re-erection. It will be an extensive, commodious building, with spacious wards having windows on both sides, convalescent rooms, etc. The accommodation for out-patients, other offices, and one ward, will be on the ground floor; wards for medical patients will be on the first floor; and above will be the surgical wards and operating-room."

Supposing this plan to be carried out (which, for the credit of the future surgery of Cambridge, I sincerely hope it will not be), I think we might predict very confidently that the low mortality hitherto so honourable to the institution and its surgeons, will rise much nearer to the high rate of our city hospitals. In a recent discussion in the French Academy, M. Malgaigne showed that the mortality from erysipelas and allied affections associated with overcrowding is increased when surgical wards are placed over other wards; and Velpeau supported the statement when he admitted that erysipelas was more frequent in the Charité among the females than among the males; the female wards being on the second floor, immediately over those occupied by the men. Women after delivery are so nearly in the same condition as patients after operation, that we may learn a great deal from the mortality in lying-in hospitals, or in the maternity department of large hospitals, and we find the same increase of mortality in the upper wards. Several years ago the lying-in wards of St. Louis were on the ground-floor, hence in on every side, and almost dark; still the mortality was lower than in other hospitals, puerperal



tonitis being especially rare. At the time of the construction of the Pavillon St. François, the lying-in wards were removed to the first floor, which was isolated and very light. The latest sanitary improvements were adopted; yet the mortality, instead of diminishing, rose rapidly to equal that of other lying-in hospitals.

But lessening the number of large hospitals, and increasing the number of small hospitals, and having the wards all on one story, would all be useless if there are too many beds in a ward. It is very possible that a large hospital, with large wards and beds widely apart, would be a far better place for the sick than a small hospital in which many beds are crowded into small wards. Indeed, by lessening the size of a ward, we multiply the surfaces and angles to which putrescent matters or organic poisons may adhere. And it is extremely probable that we may have to go farther than this, and not only lessen the size of hospitals, the number of floors of the building, the number of wards, and the number of beds in each ward, but also isolate the patients in all cases when contagion or infection is probable. Not only must communication of wards with each other be avoided, but there must be separate wards, containing one, or at most two beds, for patients recently operated on, and in lying-in hospitals, for women recently confined, before we can hope to reduce mortality from the excessive to the unavoidable rate.

Now, to show that these lessons of modern sanitary science are borne out by the most recent discoveries in physiological chemistry, let me turn for a moment to the remarkable labours of Pasteur—all made known within the last five years. His memoir on "Alcoholic Fermentation, in 1860; "On the Organised Corpuscles existing in the Air," and his "Examination of the Doctrine of Spontaneous Generation," in 1862; in the same year his "Studies on the Mycoderms," and the "Manufacture of Vinegar"; and in 1863 his "Examination of the part attributed to Oxygen in the Destruction of Animal and Vegetable Matters after Death," and his "Researches on Putrefaction," have all a very important bearing upon the development of purulent infection and the whole class of diseases most fatal in hospitals and other overcrowded places.

Commencing by purely chemical researches into the phenomena which accompany the decomposition of organic bodies, M. Pasteur was soon led into the field of physiology. He found that fermentation was always associated with the existence and development of certain microscopic beings; and he was led to inquire whether the generation of these living corpuscles was a spontaneous act or change, or whether it could only be explained by the ordinary laws of reproduction. In order to ascertain what germs might be suspended or floating in the atmosphere, he adopted the simple expedient of causing a current of air to pass over gun-cotton—a substance soluble in a mixture of ether and alcohol. The fine fibres of the gun-cotton act as a sort of air-filter, arresting all the solid particles, and the finest powders are found in the solution, and fall slowly to the bottom of the fluid. By careful microscopic examination he found in these atmospheric impurities (1) a quantity of granules of starch, very easily recognisable, and the numbers explained by the abundance of cultivated cereals; and (2) corpuscles which resemble in every particular the germs of the lowest organisms, and vary greatly in size and structure. The germs so collected are fecund. If they are sown in infusions in which any pre-existing germs have been destroyed by ebullition, and which have only been exposed to air which cannot possibly contain any living organism, as it has been passed through a tube of red-hot platinum, an abundance of

cryptogamic vegetables or infusorial animalcules very soon appear. These are the *Mucors* or *Mycodermes*, which cover the liquid with a greasy or gelatinous pellicle; the *Mucedinea*, formed of small tubes; *Torulacea*, or non-tubular plants, which attach themselves to the bottom of the vessels. The infusoria are small *Monads*, *Bacteria*, and *Vibriones*. The *Bacteria*, especially the *Bacterium Termo*, exist in the air in immense abundance. The smallest of the infusoria is found also in putrefying substances. It multiplies in the intestinal canal of man, and is found constantly in the white matter which collects daily between the teeth. In sour milk it is found in company with *Vibriones*, the most vivacious of the infusoria, whose germs are not destroyed by a temperature of 100° centigrade. The spores of the *Mucedinea* remain fecund even up to 120° centigrade. It appears that a short exposure to 130° centigrade destroys all fecundity even in the most robust; but in nature neither spores, vegetable, nor animal germs are ever exposed to a degree of heat which can render them sterile.

When an organic infusion has been deprived of germs by heat, and is mechanically protected from the corpuscles which the air might carry to it, it is as unalterable as an ordinary chemical solution of a mineral. The liquids ordinarily the most prone to fermentation now show no tendency to decomposition—no symptom of life is manifested. It is quite clear, therefore, that the development of living beings in organic infusions is not spontaneous, and that, in the circumstances under which fermentation ordinarily takes place, the germs of the living beings are carried in the atmosphere.

The germination of inferior beings as powerful agents of decomposition, has relations as important in the putrefactive as in the fermentative process. Whenever organic matter undergoes change—dies, is decomposed, putrefies—germs are sown which find their nourishment in the remains given up to destruction. Without these germs the immediate principles of living bodies would be almost indestructible; with them, everything which has ceased to live is returned to the atmosphere and to the mineral kingdom. Blood as it issued from the arteries, fresh urine, milk received into close vessels, and open only to air which had been deprived of germs, remained unaltered for three years; but when these liquids were exposed to ordinary atmospheric air, they very soon became covered with *mucedinea*, *bacteria*, and *monads*, and were filled with moving *vibriones*.

Each form of fermentation or decomposition is associated with the growth and development of some low form of vegetable or animal life. It had long been known that the yeast formed in brewing beer was an organised substance, living, and formed by a mass of cells capable of reproduction by budding; but it was left for M. Pasteur to show that the cells of the yeast really nourish themselves at the expense of the sugary infusion, and transform it, not by a physical or chemical, but by a physiological action; that some substances added to the infusion favour the budding and multiplication of the yeast, others retard, others altogether arrest it—like the albumen of fresh eggs, which kills it, or acts on it as a poison. When alcohol is transformed into acetic acid, a vegetable mycoderma (*mycoderma aceti*) is the agent of the transformation. When sugar or lactic acid is converted into butyric acid, the agent is not a vegetable, but a small animalcule, seen in the form of small cylinders or rods, isolated or united into chains of many links, which turn, undulate, and float in every direction in the liquids, and are reproduced by fission. The most remarkable property of these *vibriones* is that they have the power of living and indefinitely multiplying themselves without oxygen. Not only can they

live without air, but air kills them. This peculiarity essentially distinguishes the mycodermis from the vibriones. The mycodermis incessantly feed on oxygen, and when they do not find it in solutions take it from the atmosphere. The vibriones are killed by oxygen, yet it is by them that the butyric and tartaric fermentations are effected.

These are the most simple of the decompositions produced by animalcules which live without free oxygen. They are phenomena which do not differ from what is called *putrefaction* of animal substances. In putrefaction, as in the butyric fermentation, the work of the vibriones is prepared for them by infusoria. In infusions of animal substances no change is observed for about twenty-four hours; then a slight movement may be observed, which is caused by small animalcules—*monas corpusculum*, *bacterium termo*—moving in all directions in search of the oxygen in the infusion. If access of air is shut off, the infusoria die as soon as they have consumed all the free oxygen, and fall dead to the bottom of the vessel. But if the infusion is open to the air, they find an inexhaustible supply of oxygen at the surface, when they soon form a pellicle of gradually increasing thickness. But as soon as this living pellicle has been formed, the germs of vibriones are in their turn fecundated, and these animalcules rapidly multiply in a liquid which contains no oxygen. At the bottom, the vibriones change the organic matters into substances of more simple composition; while at the surface the bacteria and mucidinea burn these new products with the oxygen which they take from the atmosphere, and reduce them to the state of the most simple binary compounds—water, ammonia, carbonic acid. In the same way, after the death of an animal or human body, the vibriones and their germs which have remained in the intestinal canal quite inoffensive so long as the movements and functions of life have prevented their development, commence their office directly after the death of the body which they have inhabited. Shut off from oxygen, surrounded by nourishing food, they pass from within outwards, destroying the substances which surround them. At the same time the germs of infusoria which the air has deposited upon the external surface of the body are developed, and work from the surface inwards. At length the infusoria and vibriones meet. The vibriones are killed by the contact of the air, the infusoria die in their turn as soon as they have consumed all the vibriones, and the work of destruction is then complete.

I have given this rapid sketch of some of the principal results of the researches of Pasteur, in order that the influence of atmospheric germs upon our bodies in health and disease may be comprehended. Although the air contains the germs which are necessary for the processes of fermentation and putrefaction, these germs cannot be everywhere present in all forms and equal numbers. In some currents of air there are few, in others many; they are numerous in the lower strata, fewer and fewer as we rise higher and higher, and almost absent at the level of the snow-capped Alps. Air taken on the slopes of Mont Blanc was almost free from germs. On the chain of the Jura they were more numerous; and they increased in quantity as one descended into the valleys and approached inhabited places, becoming most abundant in the air of large cities, where an enormous quantity of organic matter is daily decomposed. Their influence upon the development and propagation of epidemic and contagious diseases has yet to be made out; but something has been done. Many years ago, Dr. Angus Smith led the way by his examination of the air of large cities and of crowded rooms, which others have carried on further. M. Chalvet found in the air of the wards of St. Louis a large quantity of

starch-corpuscles; and he collected a great deal of putrescible organic matter from the walls, windows, and bed-curtains, and found that the linen returned from the laundry was still tainted by altered blood, pus, linseed-meal, and other organic substances—probably as capable of infecting as threads charged with vaccine lymph. When watery vapour near a suppurating focus was condensed, it was found to be strongly charged with irregular corpuscles resembling dried pus; and Eiselt, of Prague, found small cells, like pus-cells, in the air of a ward where epidemic ophthalmia was raging. The following extract from Chalvet's paper was given in the BRITISH MEDICAL JOURNAL for July 12th, 1862:—

"The atmosphere of a hospital is no longer a vague expression. The air of it differs essentially from pure air. In 1860 I witnessed the experiments of M. Réveil, and recognised in the most positive manner the presence of organic corpuscles in the apparatus constructed by that skilful chemist. We then observed chiefly cells and the *débris* of epithelial cells; corpuscles of divers forms, which became yellow under the action of nitric acid; and bits of charpie charged with these corpuscles. Under like conditions we saw, with M. Kallmann, in the laboratory of M. Réveil, organic *débris* incrustated with a granular substance, which gave the reaction of copper. The dust thus observed was collected in an ophthalmic hospital, where sulphate of copper was largely used as a caustic.

"Dust, collected by dusting the walls of the ward St. Augustine at St. Louis, furnished me with 36 per cent. of organic matter. At another period, in the laboratory of M. Réveil, dust collected from the same quarter yielded 46 per cent. of organic matters, which consisted in large part of epithelial cells, and yielded a horny smell when calcined.

"When wetted, the dusty powder quickly gives off a very fetid smell. Doubtless, the thick layer of dust covering the walls of our old hospitals may produce gases capable of favouring the transport through the air of corpuscles, which, perhaps, play a very important part in the air of hospitals."

When commenting on the spread of puerperal fever, M. Trousseau says:—

"These germs will not be developed as readily in all patients, because the conditions of their reception vary infinitely. Some patients, like certain earths, may not receive certain germs. The wind may spread the same seed widely over a country, and yet the grain will not spring up everywhere alike. Here the soil may be too wet; there too dry; here other germs have grown up, and stifled the new seed. Just so is it with morbid germs and ferments. They, individually, require conditions favourable to their development."

Carrying on the analogy between puerperal fever and purulent infection in the various forms which contribute so large a share to the excessive mortality after surgical operations, and applying the knowledge for which we are indebted to Pasteur of the presence in the atmosphere of organic germs which will grow, develop, and multiply, under favourable conditions, it is easy to understand that some germs find their most appropriate nutriment in the secretions from wounds, or in pus, and that they so modify it as to convert it into a poison when absorbed—or that the germs after development, multiplication, and death, may form a putrid infecting matter—or that they may enter the blood and develop themselves, effecting in the process deadly changes in the circulating fluid.

That these low forms of animal life may seriously affect the blood of the higher orders of animals, is clearly proved by the recent researches of Davaine, who has furnished us with the first well-established example



of a disease of the blood due to the presence of inferior beings which are capable of development and multiplication in the torrent of the circulation. These creatures (*bacteria*) differ from the whole class of infusoria which form in putrefied matter, as they disappear completely as soon as putrefaction of the blood commences. The bacteria are rapid consumers of oxygen; and when they exist in the blood they absorb the greater portion of the oxygen furnished by respiration, and thus hinder the combustion of all the effete and used-up substances which ought to be eliminated from the body. The blood, instead of nourishing the body, nourishes the parasites. Inoculation of animals with fresh blood which contains them leads to their development in the blood of the inoculated animal, not in any special organ. They consist of minute, straight, extremely fine filaments, varying in length from four to twelve thousandths of a millimetre, and have no spontaneous movement whatever. When the blood putrefies they become flexed in different directions, and then break up and disappear.

M. Davaine was first disposed to consider them as belonging to the filiform infusoria, the bacteria or vibriones, from which they differed only in the absence of movements. In subsequent observation, however, he found a great number of these corpuscles of far greater length than that assigned to bacteria or even vibriones. He now believes that they cannot be properly classed with any of the known species; he considers them to be a well-defined species, resembling the filiform protozoa by their mode of generation and propagation, the filamentous confervæ in form, appearance, and dimensions, and certain ferments by the phenomena which they induce. M. Davaine proposes to term them, provisionally, merely *bacterides*. There are considerable varieties observable in the size of the bacterides, without any condition of the inoculated animals explaining the fact. Their number also greatly varies, from myriads found in some instances, to their rare occurrence in others. A very peculiar condition in animals affected with carbuncular disease, is the disposition which exists for the globules of blood to become agglutinated to each other, so as to present little islets in the serum. When the blood infected with bacterides begins to putrefy, these agglutinated globules separate again. The blood of the capillaries is far richer in bacterides than is that of the large vessels; but they have not been found to have passed from the mother to the foetus, although existing in prodigious numbers in the placenta. When putrefaction has commenced, and the bacterides can be no longer recognised, the blood ceases to possess the power of inoculating the carbuncular disease; although, if used in sufficient quantity, it may still cause the death of the animal, with other accompanying phenomena. The carbuncular disease, or splenic apoplexy, as observed in sheep, and which first led to the discovery of the bacterides in the blood, can only be transmitted by inoculation when the blood is fresh. The power which the blood possesses to communicate the disease continues for a longer or shorter time after death, according to the temperature; this faculty disappearing during the heat of summer in less than two days. Dried blood may retain the power of propagation, providing it be rapidly desiccated prior to putrefaction; and it is highly probable that dried bacterides transmit the disease in flocks of sheep through the medium of the respiratory organs. The disease may, too, be transmitted by the agency of the digestive organs, though less certainly than by subcutaneous inoculation. The duration of the period of incubation, after inoculation with fresh blood, has in Davaine's experiments varied

with the size of the animal; but the rapidity of the occurrence of death has not been found to be in proportion to the number of bacterides produced. They multiply within a very few hours after they first appear, but cease to multiply after the death of the infected animal. Inoculated rabbits lived from eighteen to seventy-seven hours, a mean of forty hours; but only five hours after the bacterides appeared, thus giving thirty-five hours as the mean period of incubation. The blood in the heart and large vessels was found firmly coagulated.

In connexion with these most important observations, I cannot do more than allude to the recent researches on trichinosis, so beautifully demonstrated last night in the grand old hall of Gonville and Caius College, by Dr. Thudichum, which have already been so thoroughly worked out, and add so much to our knowledge of those diseases in the human subject which are caused by the inoculation, inspiration, or digestion of the ova or germs of lower animals. Nor need I refer to the admirable paper of Dr. John Harley, on the Endemic Hæmaturia of the Cape of Good Hope, which he proved so conclusively to depend upon the development within the human body of the eggs of a parasite—one of the Trematode class of worms, and of the family Distomum. The dependence of various skin-diseases upon the growth of vegetable parasites is now quite familiar to us all. The *Achorion Schönleini* is almost as universally recognised as the cause of favus—the *Trichophyton* of tinea tonsurans—the *Microsporon Audouini* of alopecia areata—the *Microsporon furfur* of pityriasis versicolor, as is the *Acarus Scabiei* of scabies, *Pediculi* of some forms of prurigo, or the *Entozoon Folliculorum* of acne. In all these instances, however, inoculation, or mediate or immediate contact, has been assumed; and it is only lately that the presence of living germs in the air, capable of reproducing contagious diseases, has been demonstrated. The honour of this important addition to our knowledge is due to M. Lemaire, who contrived an apparatus which conveys a current of air over the scalp affected with favus into receivers containing ice. In this way he was enabled to detect the achorion in the air itself so carried, and in the moisture which ensues upon its condensation in the refrigerators, and was able to reproduce the disease by means of the achorion so obtained from the air. Still more important are Dr. Kennedy's curious case, illustrating the production of measles by the inoculation or inhalation of the fungi given off from mouldy straw or linseed-meal; and Dr. Salisbury's corroborative proofs of the production of a disease like measles by inoculating the fungus—an inoculated disease which seems to protect patients from ordinary measles.

And here I should end with the mere suggestion that the members of this Association may do good service in the cause of science, by carrying out these observations, confirming or refuting, correcting or amplifying them. But the real practical end of all our work—the prevention and cure of disease—the lowering of excessive mortality—must not be lost sight of. And here, fortunately, the recent experiments of Polli of Milan, on the action of sulphurous acid and the alkaline and earthy sulphites, open to us a wide field for inquiry, brightened by cheerful rays of hope.

In his work, we first find a record of experiments on animals which prove—

1. That the injection of a certain quantity of pus into the blood produces pyæmia and affections characterised by multiple abscesses.

2. That the injection of putrid matter produces septicæmia, or putrid infection, characterised by the symptoms of typhoid gastro-enteritis.

3. That the injection into the blood of the exudative materials in contagious diseases, as in glanders, produces the general contagious affections.

In all these cases, the introduction of the foreign substance or poison into the blood must be regarded as the origin of the disease; and Polli went on to inquire whether it would be possible to render the poison inactive, or neutralise it, without such an alteration of the properties of the blood as would endanger life. A great number of experiments upon the action of sulphurous acid and the alkaline and earthy sulphites, showed that sulphurous acid prevents or arrests all known fermentations of organic matters, as well as the putrefactive metamorphosis of animal tissue and liquids; having a much more energetic antiseptic action than arsenic or prussic acid, while it is not, like these substances, poisonous. But the irritating effects of sulphurous acid on the mucous membrane led to experiments which showed that the sulphites of soda, potash, ammonia, magnesia, and lime can be given either in the solid or fluid form in efficacious doses; that they may be found in the urine even several hours after administration; and that the blood, flesh, and viscera of animals to whom they have been administered, resist decomposition much longer than in non-sulphurised animals.

These results led to a therapeutical inquiry. If the administration of sulphites by the mouth could so modify the fluids and tissues of a living animal as to render its organic constituents more able to resist the putrid fermentation which they would naturally undergo after death, it was a rational hope that a similar effect would be manifested also during life, and that the living fluids and tissues charged with the sulphites would resist the action of morbid poisons which lead to an unnatural rapidity of putrefaction after death.

Having proved that the sulphites, when given internally, are absorbed, and exert their specific action upon the blood and tissues during all the time necessary for their conversion into sulphates by repeated passage through the lungs, and the elimination of the sulphates;—and, further, that to secure the longest presence of the sulphites in the organism, or to retard their conversion into sulphates, it is useful to substitute the hyposulphites, as they require a long oxidising process to convert them into sulphates,—the cautions are laid down—1, that they should be given as long as possible after food, unless it is especially desired to neutralise the fermentative action of the gastric and pancreatic juice; and, 2, that nothing containing citric, tartaric, malic, or oxalic acid, should be taken after them, as these acids decompose the sulphites and hyposulphites, and set the sulphurous acid free. But acetic acid does not decompose these salts.

It then remained to prove that, when the sulphites are administered to a living animal, they really do alter the action of pus upon the blood, as well as that of putrid matters injected into the blood, or of a virus distinctly contagious and not putrid. By a large number of experiments on dogs, it seemed to be perfectly established that the sulphite or hyposulphite of soda really did neutralise the effects both of pus, putrid matter, and the secretions in glanders, and without any ill effect upon the animal. The administration of those salts to children and adults showed that they are perfectly well borne by the human organism up to three or four drachms daily, and that this quantity is sufficient to prevent or arrest the action of morbid poisons.

I must refer to the work itself for any further account of these experiments; and, as it has not been translated from the original Italian, it is well worth the attention of the Council of the New Sydenham

Society. But I may add, for the information of those who may be willing to carry on these observations, that the sulphite of magnesia in the solid form answers well for internal administration. It contains more sulphurous acid than other sulphites, and is not disagreeable. The sulphite of soda is disagreeable, easily decomposes, and is chiefly useful in solution for lotions or enemata. The sulphites of potash and ammonia are too disagreeable and changeable for medical use. The hyposulphite of soda is not very disagreeable: its solubility makes it convenient for administration, but it is more adapted for prophylactic use than for severe cases, its action being much slower than that of the sulphites, as it must be converted into a nascent sulphite before the wished-for effect can be obtained.

Some cases of septicæmia in which I have given the hyposulphite of soda having been already brought before the profession, I will now only add that the effects convinced me that it is a remedy of great value, well worthy of a general and extended trial. But I trust that no such exaggerated expectations will be entertained of its value, or of that of any other remedy, as could possibly lead any one to neglect those leading principles of sanitary science which should govern the size and construction of our hospitals, or those lessons recently taught by physiological chemistry which confirm those sanitary principles—which teach us how easily our patients may be poisoned by any want of that attention which should always secure the most scrupulous cleanliness and purity of everything surrounding them—and which prove that a knowledge of principles and a practical supervision of details must be combined to enable us to recognise, avoid, prevent, or counteract the CAUSES OF EXCESSIVE MORTALITY.

**FEES.** A New York doctor says: "The truth is, we must bring our fees to a gold basis, or no one can tell what his income is, or on what principle to estimate his services. If we do not, and call the 'green-back' a dollar in fact as well as name, we shall find ourselves in a position similar to that of a person in a railroad car looking at a train upon a parallel track and thinking how rapidly it moves past him."

**LAGOS: A MODEL Miasmatic Island.** The island is low and swampy, in the delta of a tidal river; the town of the filthiest description. Marshy tracts give off an immense quantity of miasma, and even the sea breeze has in its passage to the island to pass over miles of lagoon and swamp, and must become loaded with pestilential vapours. In the town collections of decaying animal and vegetable matter are to be met with at every turn. The religious prejudices of many of the natives enjoin them to pollute particular spots, however inconvenient, with nuisance. It is almost impossible to change their practice of burying the dead in their houses. In several parts of the town there is a depth of six to twelve or more feet of rich black soil, produced by the decomposition of human excreta and leaves, the accumulation of centuries. The habitations of the natives consist of the same low mud huts, which appear to be the dwelling-places of the negro wherever the white man has not exerted his influence. The principal diseases are fevers, from which blacks are not more exempt than whites, though with the black man there is not the same tendency to cerebral complication which renders those diseases so fatal to Europeans. Such was Lagos in 1862. The ratio of the troops (black) constantly inefficient through sickness was 85·71 per 1,000. But plans were being arranged for the better accommodation of the troops, and for sanitary measures for their protection as far as may be.



## Original Communications.

### NOTE ON THE SYPHON DOUCHE, AND ITS USE IN AFFECTIONS OF THE UTERUS AND THROAT.

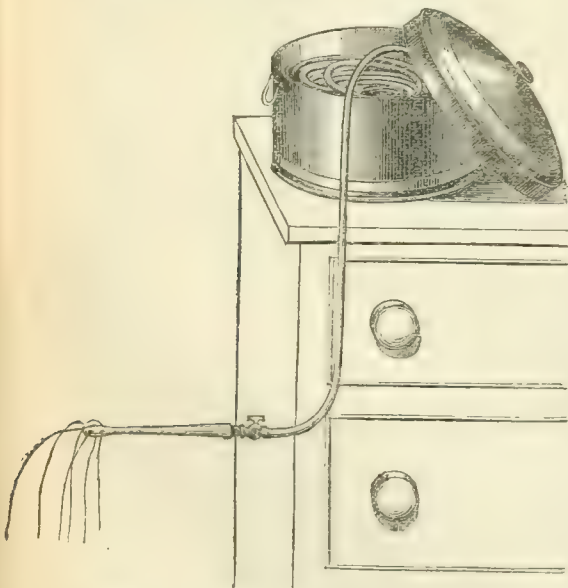
By ALEXANDER FLEMING, M.D., F.R.C.P. London,  
Physician to the Queen's Hospital,  
Birmingham.

I do not pretend to any originality in either the principle or application of this very simple, but almost unused instrument; but being convinced, by much experience, of its value, I am anxious to draw attention to its great usefulness in diseases of the throat and uterus.

The douche I employ is made thus. An India-rubber tube, five inches long, half an inch in external diameter, and retaining the wire inside, is fitted at one end with a brass stopcock, on which the vaginal tube is screwed. The other end is inserted in a large jug of water placed at a suitable height. The tube is tied with string to the handle of the jug, care being taken that the end is near the bottom of the vessel. The jug may be put on the top of a chest of drawers; and, to avoid the risk of its being overturned, it may be placed inside an open box. Should a more complete syphon douche be desired, I have had the following convenient instrument made for the use of my patients by Mr. Salt of Birmingham. It is a round tin vessel, sufficiently large to contain two gallons of water, to the inside of which the pipe is fastened, and in which it is coiled when not in use.\*

In douching the throat, a tube of the same length, but of smaller bore than the ordinary vaginal tube, is fitted to the stopcock.

The accompanying wood-cut exhibits the form and working of the instrument.



*Diseases of the Uterus.* In using the douche, the

patient must be flat on her back, with the head on a pillow; and a bed-slipper of white ware is placed under the pelvis, to collect the water as it escapes from the vagina. The vaginal tube should then be introduced for about three inches, and the stopcock opened. As the bed-slipper fills with water, it should be emptied. The douche is continued three, five, or ten minutes, according to circumstances; and the water used may be cold, tepid or warm, pure, or medicated with borax, nitre, lead, alum, tannic acid, krameria, oak-bark, zinc, or copper.

*Advantages.* In the treatment of congestive and inflammatory diseases of the uterus and vagina, the advantages of this instrument over the ordinary forms of injection apparatus are very great. It can be used promptly, without fatigue or exertion, and without the aid of an attendant. It furnishes a continuous stream, of equal and measured force; and, the vaginal tube being at perfect rest, and quite under the control of the patient, all risk of injury to the parts is avoided. In all cases, this is of the highest importance, but especially so when the sensibility and tenderness are exalted by disease. After a little practice, the superior cleanliness and dryness of this mode of irrigation will be found of much comfort to the patient.

*Diseases of the Throat.* The value of the douche is even more evident in the treatment of affections of the throat. In relaxation, chronic congestion, inflammation, and ulceration of the fauces, it enables us to apply continuously and efficiently to the whole morbid surface a stream of water, cold, warm, or medicated. The superiority of this means over the ordinary method of gargling is most evident in actual practice. In ordinary gargling, the difficulty of bringing the fluid into contact with the fauces is always great; in some cases, it is impossible. This I have demonstrated repeatedly by the following experiment. I have painted the back of the throat with iodine, and then caused the patient to gargle with a solution of starch. On examining the throat, I have found that, in many of those experimented upon, the starch did not pass behind the anterior arch; and even in the remainder, the blue colouring matter resulting from its contact with the iodine was very partial. These experiments have been repeated for me, and with the same result, by Mr. Wilders of the Queen's Hospital, and Dr. Anderson of the General Hospital.

The result in this experiment, when the douche is employed, has been, on the other hand, most satisfactory; the blue colouring being then displayed over the entire surface on which the iodine had been painted.

Another obvious advantage of the douche over the gargle is the avoidance of the spasmodic action of the fauces, which in some cases is so severe as to render gargling very difficult, and is always undesirable when the throat is swollen and tender. In the treatment of affections of the throat in children, in whom gargling is always such a trouble, this superiority is obvious; the soothing influence of the water thus used being in marked contrast with the gasping efforts made by the little patient in his attempts to gargle. The comparatively slight exertion required in its use is also important when the patient is weak and exhausted, enabling him to continue without fatigue the irrigation of the throat as long as may be requisite.

*Mode of Using.* Care must be taken that the vessel containing the fluid to be applied to the throat is placed at a sufficient height above the patient to bring the syphon principle into action. The patient should be seated before a basin, over which he leans. He then inserts the pipe into the mouth sufficiently

\* The instrument may be had at Mr. Salt's, High Street, Birmingham.

far to secure the fluid reaching the back of the throat; the stopcock is turned, and the irrigation continued as long as may be necessary; the fluid flowing into the basin as it leaves the mouth.

The diseases of the *uterus* in which I have found the douche of most service are, leucorrhœa, menorrhagia, dysmenorrhœa, congestion, inflammation, erosion, and ulceration of the os uteri. The diseases of the *throat* in which it has proved of most value are, acute and chronic inflammation, relaxation, and simple and syphilitic ulceration.

In the treatment of these affections, according to the mode of application, the douche may be used as a tonic, sedative, or astringent. We obtain a tonic action when cold water is used; but its employment must be continued for a few minutes only. The douche in the first instance lowers the vascular activity and nervous sensibility of the part; but, on its cessation, this is followed by reaction and exalted textural and functional energy. By successive applications of the water at proper intervals, the os uteri finally becomes firmer in substance and healthier in function, or, in other words, its tone is improved. On the other hand, we obtain a *sedative* action (1) by the *continuous and prolonged* use of cold or iced water, which directly lowers the heat and depresses the nervous and circulating systems of the parts exposed to its operation; and (2) by the employment of warm water, which directly relaxes the structures and enfeebles their vital energy. Lastly, the douche is made *astringent* by the addition of one or other of the astringent drugs formerly mentioned.

### CASE OF DEATH FROM SHOCK.

By I. HARRISON, F.R.C.S., Reading.

UNDER the above title, a paper (a summary of which will be found in the *BRITISH MEDICAL JOURNAL* for Dec. 12th, 1863, p. 633) was read by me at the Pathological Society of Reading on November 5th, 1862. As the case was in many respects a very interesting one, I will now give its conclusion.

An inquest was held; and the finding of the jury was, "Death from the effects of the accident."

In due course, a claim was presented to the assurance office in which the deceased had been insured. They objected. There was no alternative but to get up the case as completely as possible, and submit to trial. This was very ably done by Messrs. Whatley and Dryland, solicitors, of Reading.

Mr. Jonathan Hutchinson was applied to for more extended information on the various points of the case. Mr. Luke was also consulted. After various conferences, Mr. Hutchinson drew up the following conclusions.

"1. A compound dislocation, with fracture, of the thumb, is not a trivial accident, but a severe, and occasionally very serious one.

"2. It is especially likely to be followed by serious consequences in an elderly and rather feeble man.

"3. The occurrence of severe nervous shock at the time of the accident would very greatly increase the risk attending the local injury.

"4. In this instance, mortification of the thumb occurred, and was spreading to the forearm at the time of the man's death.

"5. The process of mortification doubtless commenced very soon after the injury, as it was complete (the thumb being cold and black) on the day before death (the third after the accident).

"6. Mortification of this character is quite sufficient to account for the symptoms presented, and for the fatal issue.

"7. The occurrence of a scarlet rash is not at all unusual after accidents and after operations, especially in cases of blood-poisoning.

"8. It is improbable in the *highest degree* that Mr. T. had scarlet-fever: *a.* His age. *b.* The rash was not general over the whole surface. *c.* There was no sore-throat. *d.* The tongue was not like scarlet-fever. *e.* He was quite well at date of accident. *f.* He would not have died at so early a stage, if it had been scarlet-fever. *g.* All the medical men who saw the rash considered that it was not scarlet fever.

"The probable causes of death were, the fall; the injury to the thumb; the shock to the system (bodily and mental); gangrene of the thumb; the shock of the gangrene and toxæmic absorption from the gangrenous part."

It may be added, that no scarlatina followed in the house, though there were children who had not had it.

We were prepared to go to trial at the Kingston Assizes. Mr. Holt and Mr. Paget were retained by the office; and they, I believe, would have supported the view that death arose from scarlatina. A few days, however, before the assizes, the money was paid; viz., £1,000.

A clinical lecture by Mr. Paget, on "Scarlatina after Operations", in the *BRITISH MEDICAL JOURNAL* of August 27th, has determined me to publish this case; and I should be much obliged if any gentleman would have the kindness to give, through the *JOURNAL*, any information he may possess as to the frequency of *rashes like* scarlet-fever after operations, accidents, etc.

### UTERINE HYDATIDS IN THREE SUCCESSIVE GESTATIONS.

By ASHEY G. OSBOEN, Esq., Dover.

Mrs. J. P., when a single woman, aged 17, supposed herself pregnant at the beginning of 1862. She suffered most severely with sickness and retching, and was often obliged to lie in bed all day. She cannot remember having had any fall, blow, or fright, during this gestation; but on April 26th, she went to see a man who had hung himself. She did not consider that this sight had affected her, but flooding commenced a week afterwards; it soon ceased, but frequently returned, sometimes as much as half a teacupful being lost at a time till June 12th, when profuse hæmorrhage with labour-pains having come on, she was delivered by Mr. John Walter of Dover, and the late Mr. J. E. Parratt of Charlton, of a mass of hydatids—as much as would fill three parts of a hand-basin. The principal loss of blood occurred before the bulk of the diseased growth was removed. There was scarcely any loss afterwards; but on the following day, something which her mother described like a "pig's night-cap," came away; this, I suppose, was the decidua. She was much weakened by the flooding, but in the following spring, again considered herself pregnant by the same young man.

She was more sick and incapable than is usual in early pregnancy; but she had not the bilious vomiting which had been so distressing the previous time. Flooding commenced about the third month. It ceased repeatedly, and returned without warning. The principal hæmorrhage occurred when labour-pains came on June 13th, 1863, one day over the twelvemonth since the previous delivery. The hydatids were less in quantity; and the decidua passed the second day following.

Her friends supposing that these hydatids were dependent in some manner on the young man with



whom she had cohabited, dissuaded her from marrying him. Accordingly, before she had thoroughly regained her health—indeed whilst still very anæmic—she married her present husband, a thick-set, healthy man, of swarthy countenance.

The menses, which had returned a few months after her recovery from the last discharge of hydatids, ceased in Christmas week 1863; and she then considered herself pregnant by her present husband. There was only a little sickness of a morning, leading her friends to hope that this would be a natural pregnancy; but in the latter part of February, she observed two spots of blood on her linen, and about a week afterwards she fell flat on her face down a step in the yard.

A little weeping of blood continued at intervals of a week or more, till about ten days since, when, after going to bed, she lost about a quart. It ceased, however, and only returned after walking. On Saturday evening, May 14th, labour-pains set in, and I was sent for about ten P.M. I found that considerable hæmorrhage had occurred, enough to wet through several thicknesses of cloths; and the patient was exsanguine and rather faint. The uterus felt hard and globular midway between the umbilicus and pubes; the os uteri was patulous, and by inserting two fingers within, a soft substance could be felt, apparently occupying the fundus of the uterus, but unattached or not firmly attached to any part within reach. I removed a quantity of semi-transparent pale bodies, of a dirty white hue, of various sizes, from that of a small lentil seed to an out-door grape. They were adherent together by a yellowish material which seemed like yellow curd, and they could only be removed in small quantities at a time. The largest fragments—indeed the bulk of the diseased mass—were expelled during violent pains before 1 A.M. The hydatids and occasional pieces of loosely textured decidua at length filled a moderately sized pudding basin, and a large piece of decidua was expelled the second morning after.

There was no particular hæmorrhage after the first loss, as though the early uterine contractions had separated the decidua attachments, and the uterus contracting on its contents had closed the mouths of the vessels. On neither occasion was anything resembling an embryo discovered.

After each discharge of hydatids, there has been an abundant secretion of milk, continuing some months; and it is singular that the appearance of milk in the breasts was the earliest sign she had of her first pregnancy (?). It continued up to and subsequent to the first discharge of hydatids. It ceased for about a week, when she thought herself pregnant the second time, then returned as before, and appeared again early in this her third hydatid gestation.

REMARKS. I suppose the hydatids in this instance were the result of impregnation; and the fact of their recurrence after intercourse with another than her first paramour, seems to show that whatever the cause may be of the formation of hydatids, it is peculiar to the woman, and not dependent on the man.

I should not have thought of doubting the dependence of hydatids on impregnation in any instance, only that the remarkable case related in Dr. Fleetwood Churchill's *Diseases of Women*, 5th edit., page 283, of a single lady passing hydatids annually for nearly thirty years, makes one pause in ascribing intercourse and impregnation as their invariable and undoubted cause, even when intercourse has taken place. For since hydatids of some form or other have occurred without impregnation, this kind may occur after intercourse, and yet be independent of impregnation; the return of the disease at a corresponding period of the year for three years successively, is perhaps in

favour of the resemblance of this case to the one cited above.

My friend Dr. Graily Hewitt has stated that mechanical injury is one of the causes of hydatidiform degeneration of the chorion; for, in very many instances, he had elicited that there had been a fall or blow within about six weeks of impregnation. Now, in this case, there was before the first discharge of hydatids only the mental shock or feeling of horror about the end of the third month; in the second gestation she can remember nothing of the kind; and in the third, though she certainly had a fall about the eighth week, yet there seems reason to fear from the two drops of blood which had escaped a week previously, that already there were hydatids formed, and separation of the decidua commencing.

I hope to note the future uterine history of this patient, and to report it in the JOURNAL.

## Reviews and Notices.

THE PRINCIPLES OF SURGERY; CLINICAL, MEDICAL, AND OPERATIVE. An Original Analysis of Pathology systematically conducted, and a Critical Exposition of its Guidance, at the Bedside and in Operations: Representing the Principles of the Earliest and most Exact Diagnosis, Etiology, Prognosis, and Therapeutics, Medical and Operative. By FREDERICK JAMES GANT, F.R.C.S., Surgeon and Pathological Anatomist to the Royal Free Hospital; etc. Pp. 860. London: 1864.

MR. GANT's object in writing this book has been to point out the necessity of the application of pathology, so far as our knowledge of it has extended, to the practice of surgery.

The first part of the work is entitled Principles of Surgery. The author gives a brief historical sketch of the rise and progress of surgery and medicine. He points out that the earliest medical system was founded on clinical knowledge or symptomatology alone; but that subsequently physiology, in its chemical, mechanical, and vital aspects, has been from time to time, up to the present day, called to aid in the explanation of disease. He objects to the direct inferential application of physiology to practice; and insists (agreeing on this point with Dr. Walshe) that the relationship of physiology to rational medicine is only indirect. In like manner, he disapproves of the foundation of surgical practice on the mere knowledge of the anatomy of the body in its normal state, and on the performance of operations on the dead body.

Pathological anatomy, bearing the same relation to pathology as anatomy does to physiology, must, according to Mr. Gant, be studied in order to the attainment of success. It is important, he says, to study the pathological objects presented by every form of injury or disease, in their relation to diagnosis, etiology, prognosis, and therapeutic treatment. He states that he has found the existing works deficient in the information which he required in respect of this practical application of pathology; and this deficiency is what he proposes to remedy.

Next follows a chapter, occupying 124 pages, on the Elements of Pathological Anatomy, in which the author sketches the various changes which the textures, organs, and fluids of the body may undergo from the normal healthy standard, arranging them

under the following heads: Alterations of Degree—Physical, Chemical Constituents, Structure: Alterations of Kind—Morbid Products, Transformations of Texture, and Foreign Bodies.

The next part of the book is on the Principles of Clinical Surgery, or those of Diagnosis, Etiology, and Prognosis. This part is divided into fifteen chapters; seven being devoted to Diagnosis, four to Etiology, and four to Prognosis. In speaking of Diagnosis, the author treats in two chapters of what he calls "Negative Principles"; the aim of which is to show that neither anatomy and physiology, nor pathology—*i. e.*, functional disturbance—are alone sufficient guides to early and exact diagnosis. Proceeding then to "Positive Principles", he advances pathological anatomy as the guide during life to the earliest and most exact diagnosis, taking as illustrations fracture, aneurism, and dislocation. He then goes on to discuss the application, during life, of Clinical Pathological Anatomy, illustrating by examples the sufficiency, or the insufficiency, as the case may be, of physical and chemical signs to supply the foundation of diagnosis.

In speaking of the Principles of Etiology, Mr. Gant describes the causes of disease as being external or internal; either of which may be predisposing or direct in their operation. The internal causes are local or constitutional morbid conditions. In the detection of these, pathological anatomy must guide us; and, being the guide to the earliest and most exact detection during life of diseases and injuries, it suggests the principles of prevention. The author classifies morbid conditions as follows, commenting on each class: Local arising from Constitutional Morbid Conditions; Constitutional from Local; Local from Local; and Constitutional from Constitutional.

In the chapters on Prognosis, Mr. Gant, after some remarks on the guidance afforded by clinical pathological anatomy, lays down the following Principles.

"I. The comparative functional importance of any organ or texture determines our prognosis, favourable or unfavourable, as to the course and tendency of any morbid condition of structure it may have undergone.—*Sub-Principle 1.* Organs and textures which fulfil functions by virtue of their vital endowments (and chemical composition) suggest an unfavourable prognosis.—*Sub-Principle 2.* Organs and textures which fulfil functions by virtue of their physical properties and mechanism suggest a more favourable prognosis.

"II. Local disease or injury, *per se*, suggests a favourable prognosis.

"III. Local disease or injury, sustaining or sustained by some constitutional disorder, suggests an unfavourable prognosis.

"IV. Constitutional diseases, implying each some morbid action of a texture or textures, of general distribution, as well as of predominant functional influence throughout the system, suggest an unfavourable prognosis."

A long chapter is here devoted to the consideration of the existence, operation, and resources of the Restorative Power; these being illustrated by examples showing the natural course and tendency of injuries and diseases towards recovery.

The Principles of Therapeutics next come under notice; and, in the chapters devoted to this subject, Mr. Gant insists on Pathology as the guide in Sur-

gical Operations. It must, he says, take the place formerly occupied by Anatomy.

Finally, in a chapter on the Principles of Surgery (and of Medicine concurrently), arranged synthetically, Mr. Gant gives a summary of the views propounded by him in the previous parts of his work, and adds an exposition of the statistical method of investigation, drawing largely from the essay of Radicke, translated some time ago for the New Sydenham Society.

Those who would be more fully acquainted with Mr. Gant's views, must read the book itself. He has undertaken a very laborious task; and deserves praise for this, and also for the object by which he has been actuated—that of utilising our knowledge of pathology. We cannot avoid thinking, however, that he might have expressed his views in more concise, and sometimes more readily intelligible language, than that which he has employed. There are some opinions advanced with which some may find it difficult to agree; and some which, if we had space, we should be inclined to criticise—such as, especially, the apparently too sweeping condemnation of the inferential application of physiology to the explanation of disease. But the book has great merits, and every allowance must be made for the author's mental bias, and for the zeal with which he has sought to establish—very justifiably—the high value of pathological anatomy as a guide to the prevention, discrimination, and treatment of diseases and injuries.

THE PRINCIPLES AND PRACTICE OF MEDICINE; designed chiefly for Students of Indian Medical Colleges. By JOHN PEET, M.D., F.R.C.P., Surgeon-Major Bombay Army; Principal and Professor of Medicine, Grant Medical College. Pp. 590. London and Bombay: 1864.

THIS book, as its title indicates, has been specially written for the use of the students of the medical colleges in India; but Dr. PEET observes "it may perhaps be found in some degree useful to those medical officers who are for the first time entering on medical practice in India."

It consists of two parts—the first on General, and the second on Special Pathology. In the division on General Pathology, the author treats in succession of modes of death; elements of disease; causes of disease; hygienics; and therapeutics; while, in the second division, the diseases of the abdomen, chest, and head and spine, and general diseases, are described in order.

We do not see anything in this book which calls for special remark or analysis; and we shall, therefore, content ourselves with a general expression of approbation. Dr. Peet has written especially for practitioners in India, and has very properly directed special attention to the circumstances peculiar to or prevalent in that country, which influence the nature or treatment of disease. The introduction of two chapters on Hygienics, or the Prevention of Disease, is a proof that Dr. Peet fully appreciates the importance of this branch of science; and of its value in Indian practice, his opinion may be gathered from the following remarks:

"Obvious as are the advantages of its study, the difficulties in the way of prosecuting hygienics as a practical science are very considerable. Many causes of



disease are unknown; and of those that are known, not a few are so related to occupations, social customs, and in India to religious observances, that it is at present impossible to prevent their operation. It is the duty of the medical practitioner to set the true nature of such causes before the public and the government, leaving their removal to be effected by the gradual progress of enlightenment and a wise and cautious legislation." (P. 126.)

Dr. Peet has done a good service to the rising generation of medical practitioners in India, by the production of this book.

## British Medical Journal.

SATURDAY, OCTOBER 1st, 1864.

### PUBLIC HEALTH REPORT.

THE Report of the Medical Officer of Health of the Privy Council has just appeared. It comes opportunely. The public requires constant watching, and the occasional alarm of an epidemic or a medical report to keep its sanitary conscience awake. The present Report contains ample evidence of the necessity which still exists for this constant watchfulness.

First of all, there is small-pox. It is well known that we have in our hands a simple means by which we might absolutely banish this disease from the country. For eight consecutive years in the Grand Duchy of Baden, and for thirteen years in the city of Copenhagen, this disease has not taken away a single life; yet in London, last year, there were no less than 2,000 deaths from small-pox. In Shrewsbury, on an average of ten years, more than a ninth part of the deaths of children under five years old were due to small-pox; in Northampton and Plymouth, about an eighth part; and in Merthyr Tydvil, not less than a sixth part. These lamentable results are ascribed by Mr. Simon to the great inefficiency of our system of public vaccination. A precisely similar story is repeated as to the local prevalence of typhoid fever, diarrhoea, and similar diseases. In all cases where these diseases prevailed, the population was found to be either breathing or drinking, in greater or less extent, offensive matter which ought to have been carried away by drainage.

Of the few diseases which we are infallibly able either to prevent or to cure, scurvy is one. There was a time when this disease was as destructive to sailors both of the Royal and merchant services as small-pox has ever been on land. In Anson's celebrated voyage of 1740-2, he lost from scurvy, within the first ten months, nearly two-thirds of his whole force, and during the remaining period about half the survivors. From a knowledge of the fact that the disease is caused entirely by the absence of vegetable food, Cook was enabled, twenty-five years later, to bring back a healthy crew after three years'

absence, with a loss, from disease, of only one out of 112 men. In spite of this example, twice during the next twenty years the Royal Navy had scurvy enough to endanger its existence. Since, however, the year 1796, the use of lemon-juice has been general; and the result is, that at Haslar Hospital, which in the year 1780 received 1,457 cases of scurvy, it is now an almost unknown disease. It is a curious piece of information, in connexion with this subject, that scurvy in the middle of the seventeenth century was a land as well as a sea disease. The average number of deaths in London from this cause was 30 *per annum*, and in the Plague year they reached the number of 105. It seems that at that date our ancestors were still unaccustomed to the use of vegetables. Our readers may have heard the story that Queen Catherine of Arragon could not procure a salad till a gardener came from the Netherlands to raise it for her. But it is even said that the most common articles of the kitchen garden, such as cabbage, were not cultivated in England a century ago. Scurvy ought to be as unknown in the merchant service as it is in the Royal Navy; but it still prevails to a most alarming extent. Of the entire number of men received into the Sailors' Home at Poplar, about half are at the time of their admission suffering, more or less, from scurvy. Out of eighty-six cases of scurvy treated in the *Dreadnought*, only fourteen came from ships which had sailed from the port of London, thirty-one came from foreign ships, twenty-one from Liverpool ships, eight from Sunderland ships, and twelve from Glasgow and other British ships. Such a state of things is a disgrace to the owners of that part of our mercantile shipping in which it occurs. There can be little doubt that many ships have actually foundered at sea because the crews were so prostrate from scurvy as to be unable to handle them when overtaken by severe weather. The proportion of a crew disabled by scurvy has been found to range from 20 to 70 per cent.

In his Report, the Medical Officer of the Privy Council also tells of the danger involved in the industries which use lead and mercury. In this country, the work of glassmakers, enamellers, shotmakers, printers, and typefounders is but slightly liable to lead-poisoning. In the manufacture of white lead and sugar of lead, the danger is beyond control, as at present conducted; but it is suggested that the processes now employed might be modified. There are but two industries connected with mercury—water-gilding and mirror-silvering. The former process is being superseded by electro-plating; the latter is still an extensive manufacture. These manufactures are often carried on in ill-ventilated rooms, and to these the inspectors could not obtain access. Of their fatal results we do not know the extent. The Medical Officer urges that it is our duty to compel the observance of all necessary precautions.

The accounts given of the conditions under which printers, tailors, and dressmakers work confirm the descriptions which have in individual cases startled the public. Of one establishment which employs dressmakers, we read:

"One room, area in cubical feet, 1,280; persons present, 14; area to each in cubical feet, 91.5; the women weary-looking and squalid, their earnings from 7s. to 15s. a week and their tea; their hours, 8 A.M. to 8 P.M. The small room in which they were crowded was ill ventilated. There were two movable windows and a fireplace; but the latter was blocked up, and there was no special ventilation of any kind."

This is bad, but not much worse than the majority reported. Such-like is the condition of most of the shops of printers and tailors.

A disastrous amount of lung-disease is invariably developed among any population employed in these in-door industries. Among the printers of London, consumption, in proportion to other diseases, is twice as prevalent as even among the general male population of London. At the age of 35 to 45, the mortality of London tailors is 57 per cent. higher, and the mortality of London printers 117 per cent. higher, than that of the male agricultural population; and at the age of 45 to 50, the London tailors have nearly twice, and the London printers more than twice, the mortality of agriculturists. A still worse story would have to be told in the case of the dressmakers. Human nature is too selfish to remove these sufferings of its own accord; and here, therefore, the Medical Officer also recommends the interference of the legislature.

Another instance of the sacrifice of life, even more melancholy, is given in this Report. In the marshy districts, malarious diseases have been steadily on the decrease; but the Medical Officer was startled to find that the habitual mortality of young children was here as great as in the most infanticidal of our factory towns. In those dense centres of the struggle of life, it was well known that the absence of women from home in industrial employment led to. It was never imagined that the neglect, the drugging, and the involuntary and too often voluntary starvation of infants, known to be going on in factory towns, would be met with in country marsh districts. It appears, however, that the mortality in question is due to precisely the same cause—that is, to the employment of adult women. Women travel about the country in "gangs", under charge of an undertaker, who contracts for them, and work in the newly recovered land. Consequently, their infants are neglected; and thus malaria is banished, to introduce a fatal enemy to children. Directly the mother rises from confinement, she goes off to work, leaving the baby to any one who will pretend to take care of it. The deaths are reported as arising from "debility" or "overlying", or some such cause; but no less than sixty-seven of the medical practitioners in these dis-

tricts agree that, in the case of more than half the deaths of infants, the true cause of death is "deprivation of milk and narcotic poisoning".

"To what extent the administration of poison causes death or disease in England is not even approximately known," says Mr. Simon. The returns of the Registrar-General, showing that 400 to 500 persons a year perish from the accidental or the wilful administration of poison, are far below the reality. Few sources of death are so apt to escape discovery. Dr. Alfred Taylor was commissioned by the Privy Council to report upon the subject; and his Report is not reassuring, either as to the facility with which poison is obtained for criminal purposes, or as to the danger which arises from the carelessness or ignorance of druggists.

"So long," says Dr. Taylor, "as a person of any age has the command of threepence, he can procure a sufficient quantity of one of the most deadly poisons to destroy the lives of two adults. No one wishing to destroy another by poison, and having the knowledge to make a selection among drugs, need have any difficulty in carrying out his design. If refused at one shop, he can procure the poison at another. If refused by a druggist, he can procure it at a grocer's. If refused at a grocer's, he can procure it at a village general shop, where poisons are retailed by girls and boys, and no questions are asked."

In the case of arsenic, the legislature has attempted to impose some restrictions upon its sale; but these restrictions are practically inoperative. It is sold, moreover, on the most frivolous pretences, to almost any applicant, and chiefly by the grocer, chandler, oilman, and village shopkeeper. The sale of other poisons is free from even these ineffectual restrictions; and, whether they are wanted for murder or for suicide, they are readily obtainable by the poorest or the most casual applicant.

The danger to the general public also, arising from a careless dispensing of drugs, is very great. Persons wholly unacquainted with the properties of powerful drugs retail them without check or control; and the danger is increased by the practice of keeping innocent and poisonous compounds in close proximity, such as laudanum, tincture of rhubarb, senna, etc. No wonder that fatal cases have occurred, in which laudanum and strychnine have been given in place of innocent tinctures. In village shops, where draperies and groceries, and drugs and poisons, are all kept and sold in confusion, Dr. Taylor has known instances in which arrowroot, rice, or oatmeal has been sold with a fatal admixture of arsenic. In one case where arsenic had been given instead of arrowroot, and had killed the consumer, a witness, who went to the shop after the accident, found "rice, corrosive sublimate, jalap, and oxalic acid in different papers in the same drawer, and all under the care of an ignorant boy." Twelve pounds of white arsenic have been sold instead of plaster of Paris, and have been used to adulterate lozenges; or thirty pounds of



sugar of lead have been sent, perhaps instead of alum, to a miller, and used for admixture with eighty sacks of flour. In the one case, at Bradford, arsenical lozenges killed seventeen persons, and severely injured 183 others; in the other case, no fewer than 500 persons were more or less affected—none, indeed, fatally, but some with great severity—by the poisoning of their bread with lead.

A remarkable illustration of all these evils is afforded in the employment of opium in the marsh districts and in manufacturing towns. "There can be no doubt," it is said, "of the horrid statement, made by almost every surgeon in the Marshland, that there was not a labourer's house in which there was not a bottle of opiate to be seen, and not a child who did not get it in some form." Immense quantities of opium are sent to these districts, and the retail druggists often dispense as much as 200 pounds a year. In one district, the average annual consumption is calculated to be at least 100 grains per head; and a well accustomed shop will serve as many as 300 or 400 customers on a Saturday night. To infants it is administered under the form of "Godfrey's Cordial". When the mother, going to field-work, deposits her infant with a nurse, she always leaves her own bottle; and, as there are different sorts of "Godfrey", it not unfrequently happens that the nurse substitutes her own 'Godfrey' for the mother's, and, frightened at its effects, has summoned the surgeon, who finds half a dozen babies, some snoring, some squinting, all pallid and eye-sunken, lying about the room, all poisoned.

In the face of these facts, the interference of the legislature is naturally demanded by the Medical Officer. The common law fails to protect the public by punishing the incompetent or careless druggist. To obtain a conviction for manslaughter, it is necessary to establish "gross or culpable" negligence; and it appears to have been repeatedly ruled that such negligence does not come under the legal definition. Most people will, therefore, agree with Mr. Simon, that there must be some direct legislative interference with the sale of poisons. The Report of Dr. Taylor contains suggestions for carrying out still further and more effectually the principle already affirmed in the case of arsenic; but a great check might be put upon the evil by making persons readily and seriously responsible for any negligence in a matter of so much danger to the public.

#### BENZINE AND TRICHINIASIS.

PROFESSOR MOSLER of Giessen has convinced himself, from experiments on man and animals, that "benzine is of all remedies the best anthelmintic, and that it may be taken by man in large doses; that, taken in proper doses, it destroys the trichinæ in the intestines, and thereby prevents the spread of

their embryos; that it is, therefore, the only rational remedy which can be employed in trichina disease in man."

Professor Mosler had an opportunity of observing the effects of the benzine in an epidemic of the disease at Quedlinburg. On his return from Quedlinburg, he experimented on five young pigs, to determine the curative action of the benzine in trichiniasis. He first kept the pigs for a time, to prove that they were in perfect health; and, on April 17th, fed them with the trichinised flesh of rabbits, giving each of them a similar weight of it. Of these animals, three (3, 4, and 5) were treated with the benzine, and two (1 and 2) without benzine. No. 1 was left without any remedies. No. 2 was treated with large doses of Glauber's salts. No. 3 was treated with benzine, in conjunction with purgatives, from the eighth day after taking the trichinæ. No. 4 was treated with similar doses of benzine, without purgatives, from the eighth day; and No. 5 with benzine only, from the fourteenth day after taking the trichinæ. No. 5, however, died from the effects of benzine, which was carelessly administered on the very first occasion, and entered the lungs. On the 30th of April, No. 1 showed signs of the disease; he became thin, and weak on his legs; his eye became dull; he showed signs of suffering, and had fever. No such signs of disease were observed in Nos. 3 and 4, which had taken benzine; so that it was thought possible they might not have been infected. To be sure of this, on the 7th of May (twenty days after the trichinæ were swallowed), Professor Mosler cut a small bit of muscle from the pectoralis major of the animals, which, on microscopic examination, was found to contain numerous trichinæ. In the muscle of No. 1, however, trichinæ were far more numerous than in Nos. 3 and 4. The diseased symptoms increased in No. 1 up to May 7th; and benzine was then given to him; so that, up to May 27th, he had taken in all four ounces. The symptoms had almost disappeared. Professor Mosler gives further full details of his carefully conducted experiments; and tells us that, through the administration of the benzine, a large portion of the trichinæ were destroyed in the intestines, and so only a limited quantity of the embryos found their way into the muscles, and not enough to produce symptoms of disease.

WE have been requested by Dr. Fowler, the treasurer of the Griffin Testimonial Fund, to announce that the Committee have decided on shortly closing the subscription-list. Dr. Fowler is, therefore, desirous of making a final earnest appeal to his colleagues of the Poor-law medical service on behalf of the fund. He begs "that all intending subscribers will at once remit to him their contributions"; so that the Committee "may have a well filled purse to present to their champion at the public dinner to which it is intended to invite him, in a few weeks, at the Freemasons' Tavern." We hope that our associates will respond to Dr. Fowler's appeal. The sum contributed up to the present time, amounts to a little above £68; but surely the arduous and disinterested labours of Mr. Griffin on behalf of his brethren will, before the fund is closed, receive a fuller recognition.

THE Health Department of the Social Science Association, under the presidency of Sir Charles Hastings, has been very successful. The plan adopted this year at York, of setting apart certain days for the discussion of selected subjects, has answered uncommonly well. The discussions have been animated, and well kept up. On the 23rd ult., was brought before the Health Section, the subject of the Disposal of Sewage. The unanimous feeling was that government should not allow sewage to be discharged into and pollute our rivers; and that it is the duty of the authorities of towns to dispose of their sewage as best they may, without injury to the health of the community. On the 24th ult., Mr. Godwin brought forward the subject of Crowding in Houses; and pointed out the great increase of mortality resulting therefrom. On the 26th, Mr. Husband, of York, introduced the discussion of the Causes of Infant Mortality. These were the questions discussed. Numerous papers on other subjects were also read to the Health Section.

THE case of Mr. Bearnard, which we mentioned last week, was again brought forward at the Marlborough Street Police Court on Wednesday last. Mr. Tyrwhitt, in deciding on the case, said that since the last hearing,

"He had found a case which might or might not materially bear on Mr. Bearnard's case; but he felt there was so much doubt about the matter, though he had not much doubt himself, that he should not enforce the penalty of £20, until compelled to do so by *mandamus*. His own opinion was against Mr. Bearnard; but he should decline to enforce the penalty for the present..... If Mr. Talley chose to take proceedings against Mr. Bearnard on some future occasion, he would then grant a case."

The case of Mr. M. C. Rogers, a dentist, of 18, New Burlington Street, was then entered into. Mr. Rogers had been summoned by Mr. Talley for infringement of the Medical Act in describing himself as a surgeon. It came out, however, that Mr. Rogers was a member of the Royal College of Surgeons; the summons was, therefore, dismissed, and Mr. Talley was ordered to pay the costs. A summons against Dr. Kahn, of museum notoriety, was also dismissed, on the ground that it had never been served on Dr. Kahn, who, it was said, had been absent from England for a considerable time.

A CASE of much interest to the profession was last week decided before the Central Criminal Court. The result defines accurately the position in which medical gentlemen are placed who receive under their roof, for treatment, patients who, though not what is called lunatic, are yet so imbecile as to require a certain degree of restraint, or who are so weak in intelligence as to come under the term of imbecile. In this case, Mr. Henry Wilkins, of Ealing, was charged with contravening a provision in

the Act 8 and 9 Victoria, cap. 100, for the regulation of the care and treatment of lunatics. The particular section under which the charge was laid enacts that no person (unless he be a person who derives no profit from the charge, or a committee appointed by the Lord Chancellor) shall receive to board or lodge in any house other than an hospital registered under the Act, or an asylum, or a licensed house, or take the care or charge of any one patient as a lunatic, or alleged lunatic, without the like order and medical certificates in respect of such patient as are required on the reception of a patient (not being a pauper) into a licensed house. A young lady, who had been for some time previously placed by her father under Mr. Wilkins's charge, and who lived with, and was treated as one of his family, was found wandering at night in the Edgware Road by a policeman, who took her to the Marylebone Workhouse. There she was examined by Dr. Randle and Mr. Wilks, a Commission of Lunacy, and pronounced to be of unsound mind. Further investigation showed that she had been living at Mr. Wilkins's house, and that she was not a certified lunatic. Hence, was instituted, by the Commissioners of Lunacy, this charge against Mr. Wilkins. Abundant evidence was given to show Mr. Wilkins's proper and kind treatment of the young lady. Indeed, there was no pretence of his having shown unkindness to her. The main point at issue will be found in the judge's charge.

"Baron Pigott said, whether the present charge involved an imputation of moral turpitude against Dr. Wilkins, or whether his conduct had been marked by the utmost humanity, was immaterial to the question which the jury had to decide. No medical man was at liberty to say, "Because I am a humane man I am at liberty to do that which the law says must not be done." What the law required must be observed; and, supposing that the verdict of the jury should be against him, the humanity of Dr. Wilkins would not thereby be called in question. It had been said that legislation itself had run mad in the making of this Act. He knew not whether that was the opinion of the jury; but he himself thought there were few Acts in the Statute-book more called for than that which legislated for the care and management of lunatics and persons of unsound mind. The Act in question said that no person (unless he were a person who derived no profit from the charge, or a committee appointed by the Lord Chancellor) should receive to board or lodge in any house other than a hospital registered, or an asylum licensed, or take the care or charge of any one patient as a lunatic, without a certain order and certain medical certificates. In the first place, Dr. Wilkins received £180 a year for the care of this young woman; therefore, his case was not in compliance with the law; and then it was proved that his house, in which she was received, did not answer the conditions of the Act. Being, then, not a person who derived no profit, and not being appointed a committee by the Lord Chancellor, and not having a hospital, an asylum, or a licensed house, if he took possession of a lunatic, he must do so with the order and medical certificates prescribed by the statute. Had Dr. Wilkins any such order or any such certificates? He had not. Then what followed?



The same section enacted that a person not complying with the requirements of the statute should be guilty of a misdemeanour; and it was proved that Dr. Wilkins had not complied with any of those requirements. The defence was that this young person did not come within the definition of a lunatic at the time she was sent to his house. But to this it was replied that he had, during the last twelve months, taken charge of her after she had become of unsound mind. The words of the Act were, 'Every person being idiotic, or lunatic, or of unsound mind.' Even supposing this person was not of unsound mind when she was first received by Dr. Wilkins, still if she afterwards became lunatic, it was equally necessary that the requirements of the Act should be complied with as soon as she so became lunatic or of unsound mind. The learned Judge concluded by leaving it to the jury to say—first, whether the young person received by Dr. Wilkins was of unsound mind when she first entered his house; or, secondly, whether she became of unsound mind during the time she was under his care. In either case, if they found in the affirmative, their verdict must be that of guilty; because it had been shown that he was not a committee appointed by the Lord Chancellor, nor a person who did not derive any profit from the charge, nor was his house a hospital, or an asylum, or a licensed house, nor had he obtained the order and certificates required by the Act.

"The jury, after consulting together for a few minutes, returned a verdict of guilty generally.

"Dr. Wilkins was then bound on his own recognisance to appear at the next sessions to receive the judgment of the Court."

GREAT indignation has been excited in the profession at Sydney by the appointment of a homoeopath to the office of Visiting Medical Officer to a lunatic asylum there. A correspondent thus writes to the *Australian Medical Journal*.

"I send you a copy of the *Empire* newspaper, to draw your attention to an appointment that has been made by our Government, unknown before in any part of her Majesty's dominions; viz., that of a practitioner of homoeopathy to the important position of Visiting Medical Officer to the Tarban Creek Lunatic Asylum; and, further, that the Ordinary Visitors (this being an extra appointment) have never taken any notice of it in the way of remonstrance, or otherwise. Now, sir, I think it but right that such an indignity cast upon the profession should be freely commented upon by the medical press; and as we possess no medical periodical in this colony, I take the liberty of drawing your attention to the circumstance, in the hope you will give us a little of your mind on this subject in your next issue. I have ascertained that the appointment has been made. I may also inform you that our present Minister for Lands, although not a medical man, got his living by this homoeopathic system, before his present elevation. Our leading journal, the *Sydney Morning Herald*, is so tainted with this system, that they refused insertion of a letter on the subject, since published in the *Empire*. The name of the person appointed is Dr. Brereton, the Turkish-bath man."

The *Journal*, commenting on this, very properly points out to the other Medical Visitors that their duty is at once to resign an office which forces them into professional intercourse with a homoeopath.

"Dr. Douglas, Dr. Boyd, and Mr. Alloway, have deservedly enjoyed the esteem and confidence of their

professional brethren for many years; and, in order to maintain this regard, there seems to be no course open to them save that of immediately resigning their appointments. Their doing so would be the most dignified mode of indicating their own sense of the affront that has been offered them; and it would very fitly represent the general feeling entertained by the profession on the subject of the monstrous imposture which, singularly enough, finds its most powerful advocates among the educated and otherwise intelligent."

We shall be glad to hear that these gentlemen have done what they cannot but feel is required of them as members of our profession. We are not aware that any appointments of this kind have ever been made by any person of high position in this country. The only instances of the kind which have come to our notice is the one here referred to and the case which occurred in the Isle of Guernsey. It seems that silly tricks of this kind are only played by some stupid, puffed-up, hypochondriacal general, or dyspeptic antipodal governor, who thinks to show his wit and knowledge by patronising quackery and giving the doctors a lesson.

In a discussion on Iridectomy now going on in Paris, M. Follin thus criticises Mr. Hancock's operation; viz., cutting the ciliary muscle.

"Mr. Hancock has induced many English surgeons to follow his example; but in France M. Serre only. *A priori*, it is difficult to understand the uses of this operation. The ciliary muscle, a tensor of the choroid, is composed of two sets of fibres, longitudinal and circular; the latter sort, inserted into the capsule of the crystalline lens, must necessarily be avoided, or the capsule would be opened; and, as regards the longitudinal, they cannot be cut, but are only separated by the cataract-needle. Mr. Hancock's operation, therefore, is illusory; and has neither theory nor satisfactory observation in its favour. But iridectomy in glaucoma is a perfectly rational proceeding. Glaucoma results from tension of the eye-ball; and iridectomy diminishes the tension. Yet we know not how iridectomy acts; the explanations hitherto given are pure hypotheses. M. Follin's conclusions are: that iridectomy is an operation generally indicated in all cases of ocular tension; in glaucoma; and in a certain number of acute and chronic affections of the eye; rendering great service as a curative or preventive remedy. We have already (he adds) obtained great and numerous proofs of its value; and we may safely affirm that it is an agent which will henceforth remain fixed in our list of operations."

M. Perrin followed M. Follin, and suggested a few doubts and difficulties relative to the value of iridectomy. M. Houel went further, and showed the reverse of the medal. In his opinion, the chief cause of failure of the operation is hemorrhage, of which M. Follin made very light. The discussion so far brings before us the fact of three skilful surgeons standing in direct opposition on a point of fact in surgery. On one side, MM. Follin, Richet, and Le Fort; and, on the other, MM. Demarquay, Houel, and Perrin—one set affirming, and the other denying, the danger of hemorrhage in iridectomy. But in

this matter, they mainly referred to iridectomy as performed in connection with cataract. M. Perrin, however, admits iridectomy in glaucoma to be a "magnificent operation." M. Foucher expressed the opinion that iridectomy would have done even greater services than it has, if surgeons had been more careful in the study of the right performance of the operation, and were more careful in the proper selection of cases fitted for the operation. Throughout the discussion, the speakers have shown the greatest reserve concerning the theory of the results of iridectomy. MM. Foucher, Giralès, and Perrin, said not a word on the subject; M. Follin just alluded to it; and as for M. Richet, he declared that, in his opinion, all the explanations hitherto given were illusory. M. Meyer, however, a pupil of Von Gräfe, says *L'Union Médicale*,

"Did not follow this reservation so characteristic of the French. German science is not contented to stop at the boundary between light and darkness. It delights in launching out into the regions of the unknown; and herein German is essentially distinguished from French philosophy."

M. Meyer's theory is this. In glaucoma, the communication which exists naturally between the aqueous humour and the vitreous humour is interrupted; and iridectomy restores the communication, and so causes cessation of the glaucoma. M. Meyer, in his remarks, stated that Von Gräfe had practised iridectomy more than four hundred times. This brought forward M. Velpeau, who protested against the acceptance of such an enormous number of operations by one man. Glaucoma, according to his own experience, was a rare disease, which he had, in fact, comparatively rarely met with in the course of a very large practice. Without doubting the word of M. von Gräfe, we must not accept this number of four hundred without further details. M. Giralès, on behalf of M. von Gräfe, replied that, considering the large practice of M. von Gräfe, the figure of four hundred seemed to him in no way exorbitant. M. Le Fort added,

"That hospital statistics in Germany were perfectly trustworthy. Observations are written in Latin at the head of the bed of every patient, without exception, in Germany as well as in Russia, where, in fact, the practice is ordered by law. Mr. Le Fort, who had attended Von Gräfe's practice, said that it was immense. M. Velpeau never doubted M. von Gräfe's veracity; all he wished to state was that, from the immense number of operations stated, he was inclined to think it possible that some of them had been performed in cases which did not come under the title of glaucoma."

We should fancy that the cheeks of the great combatant gentlemen who manage our army medical affairs, and who so serenely dub the army medical officer a non-combatant, will tingle when they read the following published in last week's *Gazette*.

"The Queen has been graciously pleased to signify her intention to confer the decoration of the Victoria Cross on the undermentioned, whose claims to the

same have been submitted for her Majesty's approval, on account of acts of bravery performed by them in New Zealand, as stated against their names; viz.: Assistant-Surgeon William George Nicholas Manley, Royal Artillery, for his conduct during the assault on the rebel pah near Tauranga, New Zealand, on the 29th of April last, in most nobly risking his own life, according to the testimony of Commodore Sir William Wiseman, C.B., in his endeavour to save that of the late Commander Hay, of the royal navy, and others. Having volunteered to accompany the storming party into the pah, he attended on that officer when he was carried away mortally wounded, and then volunteered to return in order to see if he could find any more wounded. It is stated that he was one of the last officers to leave the pah. Assistant-Surgeon William Temple and Lieutenant Arthur Frederick Pickard, Royal Artillery, for gallant conduct during the assault on the enemy's position at Rangiriri, in New Zealand, on the 20th of November last, in exposing their lives to imminent danger in crossing the entrance of the Maori keep, at a point upon which the enemy had concentrated their fire, with a view to render assistance to the wounded, and more especially to the late Captain Mercer, of the Royal Artillery. Lieutenant Pickard, it is stated, crossed and recrossed the parapet, to procure water for the wounded, when none of the men could be induced to perform this service, the space over which he traversed being exposed to a cross-fire; and testimony is borne to the calmness displayed by him and Assistant-Surgeon Temple under the trying circumstances in which they were placed."

In England, doctors are made in four years. In Italy, under the present reorganisation of Instruction under Matteucci, six years of study are required of the medical student. His studies are divided as follows. In the first year, Botany, Zoology, Physics, and Inorganic Chemistry; in the second year, Physics, Organic Chemistry, Human Anatomy, Comparative Anatomy, Practical Chemistry, and Anatomical Demonstrations; in the third year, Human Anatomy, Physiology, and Physiological Exercises; in the fourth year, General Pathology, *Materia Medica*, Toxicology, Special Pathology and Surgery, and Toxicological Exercises; in the fifth year, Special Pathology and Surgery, Operations, Midwifery, Diseases of Women and Children, Pathological Anatomy, Hygiene and Medical Jurisprudence, Exercises in Topographical Anatomy, Pathological Anatomy, and Operation; in the sixth year, Ophthalmology, Clinical Medicine, Surgery, Midwifery, Clinical Studies of Mental and Syphilitic Diseases, Exercises in Surgical Operations, and in Operations on the Eye. At the end of each year, oral examinations are held on the subjects studied; and practical demonstrations in chemistry, anatomy, etc., demanded of the student. He must perform *post mortem* examinations; practise operations in surgery, eye-surgery, and midwifery, on the dead body; and make clinical diagnoses in hospital. At the end of the six years, and after all these preliminary examinations have been satisfactorily passed, he can offer himself for his doctorate, when he is required to make two reports on patients, give a dissertation on some practical point in medicine or surgery, and then defend the same.



## Association Intelligence.

### WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., *Hon. Sec.*

Taunton, September 1864.

### SOUTH MIDLAND BRANCH.

THE Autumnal Meeting of the South Midland Branch will be held at Buckingham, on Tuesday, October 18, at 1 P.M.; H. VEASEY, Esq., President.

Gentlemen intending to read papers or cases, are requested to forward the same, as early as convenient, to Dr. Bryan, Northampton.

JOHN M. BRYAN, M.D., *Hon. Sec.*

Northampton, September 1864.

### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETING.

A MEETING was held at the Pavilion Hotel, Folkestone, on Thursday, September 22nd, at 3 P.M.

*Papers.* The following communications were read.

1. Placenta Prævia in Twin Birth. By F. W. Pittock, Esq.
2. A Case of Suicide. By F. W. Pittock, Esq.
3. Fracture of the Skull. By W. Bateman, Esq.
4. Treatment of Autumnal Diarrhoea with Fruit. By H. Whitfield, Esq.

### EAST YORK AND NORTH LINCOLN BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held at the Queen's Hotel, Withernsea, on Thursday, September 22nd, 1864; OWEN DALY, M.D., President, in the Chair. The following members were also present: Drs. Bell (Hull); Sir H. Cooper (Hull); Hay (Hull); Lunn (Hull); H. Sandwith (Hull); and Messrs. Anderson (Hessle); J. Brownridge (Hull); Craven (Hull); Dadley (Patrington); Dix (Hull); H. Gibson (Hull); Hodson (Hornsea); Holden (Hull); T. Jackson (Welton); Locking (Hull); Nicholson (Hull); and Sleight (Hull). J. A. McManus, Esq. (Withernsea), and Dr. Aicheson (Staff-Surgeon H.M.S. *Dauntless*) were present as visitors.

*New Member.* J. Walker, M.D., Frodingham, was elected a member of the Branch.

*The Provident Fund.* Sir H. Cooper, M.D., was elected to represent this Branch at the Directorate of the Provident Fund.

*Paper.* Sir H. Cooper, M.D., then read a very instructive and interesting paper on Pyelitis and Purulent Infection.

An unfortunate detention of nearly an hour on the rail between Hull and Withernsea rendered it necessary to omit the reading of other communications which had been promised.

*Dinner.* When the business of the meeting was over, the gentlemen dined together, and spent a most agreeable evening.

## Reports of Societies.

### BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

#### ANNUAL MEETING.

[Held at Bath, September 1864.]

*Sanitary Statistics of Clifton.* By J. A. SYMONDS, M.D., F.R.S.E. The Registrar-General's quarterly report, last August, had produced a feeling in Clifton very like what would thrill the inmates of a nunnery were they to be told that high authority outside the walls had declared the virtue of their institution to be at no higher a level than that of a penitentiary. The figures of the Registrar-General's report were as plain as the "Mene, mene," on the walls of Babylon, and yet as much in need of interpretation: 24 in 1000 was the annual rate of mortality in Clifton. The Isle of Wight had only to answer for 15 in 1000; Newton Abbot, including Torquay, for 16; Cheltenham for 17. "Why," asked the Registrar-General, "is the mortality of Clifton 24 in 1000?" And the terrible question was asked about Clifton as one of the watering-places. The question would be startling enough to one who had taken only a superficial view of Clifton; and it was still more startling to one who observed how large a proportion of houses must belong to persons in possession of the comforts and luxuries of life, and of the means of preserving health; not less startling to one who knew that a thorough system of public sewerage had been completed, and at no small cost to the community; and most startling of all to those who had been for many years familiar with the diseases of the locality, and who knew that in what was understood by Clifton the watering-place there were no diseases that could be called endemic; that typhoid and typhus fevers were of rarest occurrence, and that, when they occurred, they were of extrinsic origin; that cholera, dysentery, and erysipelas were unknown in their zymotic forms; and that, in short, zymotic diseases, with the exception of measles, scarlatina, and whooping-cough, were rarely met with. But Clifton, in the Registrar-General's report, meant Clifton the watering-place, together with a very destitute district in the parish, and also with a Poor-law district, including five other subdistricts scattered at considerable intervals over an area of 27,199 acres, in some parts densely crowded with the poorest of houses and inmates. It was true that there was a table in the Registrar's report (which was not published in the *Times*), which stated the annual rate of mortality in several watering-places, and of Clifton among them, and in which there was inserted the parenthesis in reference to Clifton including a part of Bristol city and Bristol workhouse. The Registrar-General's Clifton was Clifton the name of the Poor-law union. Dr. Symonds proceeded to point out the injustice of estimating the rate of mortality in the Clifton union, and publishing it as the rate of mortality of Clifton the watering-place. The number of deaths in Clifton parish in the whole year of 1863 was exceptionally high, for it was 465. That was at the rate of nearly 21 in 1000; but in 1862 it was only 365, which, reckoning the population at 22,000, would make a death-rate of only 18 in 1000. In the year before, the deaths were only 329; and that would give a proportion of the population of only 15 in 1000. The paper pointed out the character of the various parishes which were included in the parish of Clifton, re-

ferring to the crowded nature of the dwellings in the out-parish of St. Philip and St. Jacob, and to the existence in the parish of Stapleton of the Clifton union workhouse, the Bristol workhouse, and the Bristol lunatic asylum; and Dr. Symonds urged that it was unfair to associate the watering-place of Clifton with such districts as those to which he had referred; and that the numerical death-rate of a watering-place should be neither complicated with the mortality in distant rural retreats, nor burthened with that of the sickly suburbs of a crowded city.

*On the Mortality of Bath.* By R. T. GORE, Esq. The author said the population of Bath, based on the census of 1861, was 52,000; the mortality for the year ending June 30, 1864, 1850; the ratio of mortality, 25.714 to 1000, ranging from 17.28 in the Bathwick district to 27.09 in the Abbey district. Of the total deaths, there were under 60 years, 41.65 per cent.; from 10 to 60, 29.25; from 10 to 100, 28.82. In the surrounding country districts, the population is 15,808; the ratio of mortality, 20.93—namely, under 10 years, 47.9; from 10 to 60, 22; from 60 to 100, 30. The statement made by the Registrar, as to the high rate of mortality, had had a beneficial effect on the corporation of Bath, in putting them in action as to getting rid of cesspools and other nuisances.

*Sanitary Statistics of Salisbury.* By A. E. MIDDLETON, Esq. The death-rate of Salisbury in the year 1775 was 30 in 100. After the year 1850, the city was placed under the Public Health Act, and a sum of £27,000 was expended in drainage. For the nine years previous to the drainage, the average death-rate was 27 in 1000; and for the nine years after the drainage, it was 13 in 1000, or about one-half. For the close of Salisbury, the average death-rate for the same period before drainage was 20 in 1000; and since drainage, 13 in 1000. Deaths from consumption for seven years before drainage, 286; for seven years since, only 143. For the last year (1863), the deaths from consumption were 11, or 1 in 818 of the population; whilst for the whole kingdom the deaths from consumption were 1 in 376.

*Inhalation of Oxygen Gas.* By B. W. RICHARDSON, M.A., M.D. The author said that his experiments on the inhalation of oxygen had led him to an almost precise knowledge of the condition under which oxygen would most freely combine with blood. The influence of oxygen in inhalation was modified, 1, by dilution of the oxygen; 2, by dilution of the blood; 3, by the activity of the oxygen; 4, by the presence or absence in the blood of bodies which stop combination. On the point of dilution of oxygen, Dr. Richardson stated that a certain measure of dilution was required, not because the body consumed too quickly in pure oxygen, but because neutral oxygen would not combine with the carbon of the blood unless it were diluted. In atmospheric air, the dilution is just sufficient; and the quantity of oxygen may be increased, with absorption at 60° to 65° Fahr., if the oxygen be raised in amount to three parts of the gas to two of nitrogen. Beyond this, the combining power is reduced, and oxygen is not absorbed. Hence, animals die in the gas as it approaches the pure state; they die not by a narcotic process, but by a process of negation. On the point of dilution of the blood, the author said that blood possessing a specific gravity of 1053 seemed to have most steady power in absorbing oxygen, as it existed in common air; by increasing the quantity of water in the blood to a limited extent, the absorption of oxygen is increased to a maximum; while by further dilution it is diminished. Below 1055, the absorption of oxygen steadily declines. In respect to the activity of the oxygen, the most differing results are obtained. If the oxygen be made fresh from chlorate of potassa,

it sustains life even in the pure form, and the activity of the functions is increased; if electric sparks are passed through the gas, or if the gas be heated, the same is the fact. On the other hand, if the gas be exposed to ammonia, to decomposing animal matter, or even to living animals, over and over again, it loses, even when diluted, its activity, and no longer combines with the blood. Dr. Richardson said that there were conditions of blood in which the power of absorption was limited. Alcohol, chloroform, opium, and certain alkaline products, formed in the blood in disease, prevented absorption of oxygen; and death not uncommonly took place from this cause. Great increase of water did the same. The question had often been put, whether the inhalation of oxygen could be usefully applied in the treatment of disease? Priestly, Beddoes, Hill, and many of those who lived when oxygen was first discovered, had formed the most sanguine expectations on this point. Since then various opinions of the extremest kind have been expressed; the differences having arisen from the entire want of order that has been followed in the inquiry. One man has used pure oxygen, another diluted; one active, another negative oxygen. One has given the gas to anæmic people, whose blood is surcharged with water; another to diabetic or choleraic persons, whose blood is of high specific gravity; the one has given it heated, the other at the temperature of the day. If even a stick of phosphorus were exposed to oxygen under such varying conditions, the phenomena obtained would be as variable as those that had been registered in physic regarding oxygen as a remedy. The difficulties of arriving at uniform results, had been almost insurmountable from another cause, that of obtaining oxygen in a practical form for inhalation. Fortunately, this difficulty was now removed. The discovery by Mr. Robbins of a mode of evolving oxygen, by acting on peroxide of barium and bichromate of potassa with dilute sulphuric acid, had given him (Dr. Richardson) the opportunity of inventing a little apparatus for inhaling oxygen, which could be carried anywhere, and used at a moment's notice. The author here exhibited and described the apparatus. It consists of two glass globes, with a double-valved mouth-piece, connected with the escape-tube of one globe. The powder containing the oxygen was placed in one globe, and dilute sulphuric acid was poured on it. The oxygen gas was evolved and passed over into the second globe, which was half filled with water. From this, after being washed, in passing through the water, the gas was inhaled. The apparatus was so arranged that any dilution of oxygen—three parts of oxygen to two of nitrogen was recommended—could be secured; and, by changing the water in the second globe, so as to have hot, or temperate, or very cold, the activity of the combination could be graduated.

*The Larynx of the Negro.* By G. D. GIBB, M.D. The essential point of difference between the larynx of the negro and that of the white man consisted in the invariable presence in the negro of the cartilages of Wrisberg; the oblique or shelving position of the true vocal cords; and the pendent position of the ventricles of Morgagni. The cartilages of Wrisberg were either very minute and rudimentary, or wholly wanting, in the white race; whilst they were large and well developed and always present in the black or coloured races. Dr. Gibb had also dissected them in monkeys, in whom, even the smallest species, they were relatively large in comparison to the size of their bodies. Those who argued that the black race were inferior to the white, and approached the quadruman in some of their features, would naturally lay hold of what he stated to prove the truth of this



theory; especially as regarded the Wrisbergian cartilages and the position of the ventricles. But he would not express any opinion on the views entertained by anthropologists respecting the position in the scale of beings occupied by black and white.

## Correspondence.

### RETIRING ALLOWANCE TO UNION OFFICERS.

SIR,—I use the freedom of a professional man in addressing you on the subject of "retiring allowance to union officers." In the *BRITISH MEDICAL JOURNAL* of the 17th inst., you state, in answer to a letter from an union medical officer on the subject, written from Easingwold,

"There can, we believe, be no doubt that the bill includes those officers who have attended to private practice as well as parish duties." (P. 346.)

We, in this country, are apprehensive that the proviso, "Whose whole time has been devoted to the service of the union or parish," excludes the medical practitioner; and I enclose a copy of the petition we forwarded against this provision in the Bill Sir Robt. Peel, Bart., unsuccessfully introduced for this country. I beg the favour of your views on the subject.

I am, etc., M.D. TRIN. COLL. DUB.

Ireland, Sept. 26, 1864.

## Medical News.

**APOTHECARIES' HALL.** On September 22nd, the following Licentiates were admitted:—

Brett, Wm. Frederick, Mecklenburg Street, Mecklenburg Square  
Colthurst, James Bunter, Carey Street, Lincoln's Inn  
Corbin, Thomas Wilson, Harringay Park, Hornsey  
Matthews, Josiah Wright, Holgate Crescent, York

At the same Court, the following passed the first examination:—

Llewellyn, Rees, London Hospital

### APPOINTMENTS.

#### ROYAL NAVY.

ALLEN, John, Esq., Acting Assistant-Surgeon (additional), to the *Victory*.

BUCHAN, Charles F., Esq., Acting Assistant-Surgeon (additional), to the *Royal Adelaide*.

POTTER, Robert, M.D., Acting Assistant-Surgeon (additional), to the *Victory*.

STOTT, John, Esq., Acting Assistant-Surgeon (additional), to the *Royal Adelaide*.

SWEETNAM, Stephen, Esq., Assistant-Surgeon, to the *Excellent*.

#### MILITIA.

M'KINLAY, W. B., M.D., to be Assistant-Surgeon Prince of Wales's Royal Berkshire Militia.

**VOLUNTEERS.** (A.V.= Artillery Volunteers; R.V.= Rifle Volunteers):—

CRAWFORD, J., M.D., to be Honorary Assistant-Surgeon 19th Lancashire A.V.

CULLEN, J., M.D., to be Surgeon 1st Administrative Battalion Dumbartonshire R.V.

GILL, J. B., M.D., to be Honorary Assistant-Surgeon 8th Cinque Ports R.V.

O'KELLY, M. G. B., M.D., to be Surgeon 12th Lancashire A.V.

HALE, M. J., M.D., to be Surgeon 3rd Administrative Brigade Lancashire A.V.

### BIRTH.

GILLARD. On September 21st, at Hovingham, near York, the wife of \*Richard Gillard, Esq., of a son.

### DEATHS.

CHADWICK, Frederick H., Esq., Surgeon, at Burnham, Somerset, aged 61, on September 12.

CHAVASSE. On Sept. 15, at Edgbaston, aged 29, the Rev. W. I. Chavasse, vicar of Kirtling, only son of \*Pye H. Chavasse, Esq., of Birmingham.

DRUMMOND, John, Esq., Inspector-General of Hospitals and Fleets, at Dover, aged 72, on September 17.

GILL. On September 23, at Pentonville, aged 63, Mary Ann, wife of Seth Gill, M.D.

HAMERTON, Frederick A., Esq., Surgeon, at Camden Town, aged 38, on September 13.

PAINE. On September 18th, at Holloway, aged 55, Isabella, widow of John Paine, Esq., Surgeon, of Mildenhall, Suffolk.

ROGERS. On August 14, at Surat, Emma Henrietta, wife of Adam Rogers, Esq., Assistant-Surgeon 12th Bombay Native Infantry.

STANISTREET, T. D., Esq., Surgeon, at Bow, aged 49, on Sept. 19.

STEWART, Charles, M.D., Surgeon 36th Native Infantry, at Jhansi, on August 6.

TWEEDIE. On July 1, at Melbourne, David Brown Tweedie, Esq., only surviving son of A. Tweedie, M.D., F.R.S.

\*WILSON, Henry, Esq., at Runcorn, on September 15.

WILSON, George E. W., M.D., late of East Sleen, at St. Germain, near Paris, aged 58, on September 9.

**THE FEDERAL ARMY.** Dr. J. K. Barnes has been appointed Surgeon-general of the United States armies, *vice* Dr. W. A. Hammond, dismissed the service.

**BRITISH ASSOCIATION.** The next meeting of the Association will be held at Birmingham, under the presidency of Professor Phillips.

**STREET PERILS.** According to last week's Registrar-General's Reports of deaths in London, we find that seven deaths occurred by carriage accidents in the streets.

**DEATH FROM TYPHUS FEVER.** Mr. Henry Wilson, surgeon, of Runcorn, Cheshire, died on September 15th, of typhus fever, caught in the discharge of his professional duties.

**BRITISH ASSOCIATION.** At the concluding general meeting of the Association, the sum of £2,037: 10 was voted for scientific purposes. Among the grants, was one of £20 to Dr. B. W. Richardson, for investigation of the physiological action of amyl compounds.

**A NEW THERMOGRAPH.** M. Marcy has given to the Academy of Sciences a description of an instrument for marking small variations in temperature. By means of this apparatus very delicate physiological experiments on animal heat may be conducted.

**DEATHS FROM ACCIDENTS.** The Registrar-General's Report shows that during the week ending on Saturday last, no fewer than forty-one persons lost their lives by accidents of various kinds. Eleven persons were killed by vehicles in the street. Three children and one adult lost their lives by burning. Five persons were drowned, and five children were suffocated. A woman committed suicide by drinking paraffin oil.

**SUSPENSION OF A MEDICAL JOURNAL.** The *American Medical Times* of September 3rd, announces that number as being the last of that journal, for the present. The reasons for this step are: "the enormous rise and the constant increase in the cost of everything relating to the publication of a weekly periodical." The publishers hope, however, that before many months they will be again enabled to resume its publication.

**EVASION OF THE MEDICAL ACT.** One of the modes by which unqualified practitioners escape the risk of punishment under the Act is, it appears, by announcing themselves as "surgeons' assistants." At an inquest lately held at Ballarat on the body of a child that had died under somewhat suspicious circumstances, the evidence of one of these medicine-men was taken by the coroner. It is to be hoped that no regularly qualified medical man is so lost to the duties he owes to the profession as to lend the sanction of his name to cover the risk that is incurred in such cases. (*Australian Medical Journal*.)

**GIFT OF A DISPENSARY.** Mr. Staniforth Beckett, of the Knoll, Torquay, Devon, has just presented a handsome building, and £5000 for its support as a dispensary, to the inhabitants of Barnsley. The late Mr. Alderson has also bequeathed £100 to aid in the work commenced by Mr. Beckett.

**HEALTH OF THE BRITISH AND FRENCH ARMIES.** From an official return just published, it appears that the cases of sickness in the French army have been two and a-half times as numerous as in the British, but that the number constantly non-effective from sickness and the sick time to each soldier have been nearly identical in the two services.

**YELLOW FEVER.** The yellow fever continues to rage in Bermuda, and its ravages are lamentable; scarcely one vessel in the harbour but has had to hoist her flag "half-mast" once—twice, indeed, in more than one case—till most of the crew had succumbed to the epidemic. The captain of the *Flamingo* was reported dead; also Captain Butcher, of the *Owl*, one of the greatest Confederate navigators afloat.

**A COBRA BITE.** The wife of a European employed on the railway near Jempeur was bitten by a cobra a little above the heel. Her husband immediately sucked the wound until the blood flowed copiously; after which he bound a tight bandage some inches above the bite, which numbed the leg. He then applied a live coal to the part, and burnt it effectually, and then immediately took his wife to Kurrachee, where she is now under the care of Dr. Mahaffy, and is getting well rapidly. (*Sindian*.)

**DEFENCE FUNDS.** At the Bath conference of the Pharmaceutical Society of London a proposition was made to form a fund to indemnify druggists who may have been assessed in heavy damages in consequence of having occasioned poisoning by misadventure. The proposition was, however, negatived by the meeting. The existence of such a fund would lay them open to inevitable prosecution, whereas now a man would not be proceeded against unless he were known to be possessed of a few spare thousands. Many other objections were expressed.

**MEDICAL FEES AT CORONERS' INQUESTS.** At the late assizes of Roscommon one of the coroners applied for a presentment for payment of a medical gentleman, and also a professional friend who had assisted him in holding a *post mortem* examination, under peculiar circumstances, in the neighbourhood of Balinasloe. The examination was held on an exhumed body, and was of a disagreeable and laborious character. Strange to say, the grand jury, or the committee, to whom this part of the business was allotted, threw out the presentment for payment of the principal operator, but allowed it for the assistant. The alleged grounds were, that the doctor, who had attended the deceased, was not entitled to payment for subsequent services. (*Western Star*.)

**PREVENTION OF ACCIDENTAL POISONING.** At one of the meetings of the Pharmaceutical Conference, held in Bath at the same time with the British Association, a report of a Committee on Accidental Poisoning was read. The committee found twenty-five cases of accidental poisoning recorded in the *Pharmaceutical Journal*, from July 1862 to June 1864; viz., ten cases in which the mistake was committed by the administrator; two by a surgeon, one by a wholesale house, one by a grocer's wife, and eleven by retail chemists or their assistants. The committee came to the following conclusions:—1. There are 17 out of the 25 cases in which there is every reason to believe that a thoroughly effective poison-bottle would have prevented the accident. 2. There are at least three

cases in which, had the poison sold been folded in black paper, and labelled properly, the accident would not have occurred. 3. Eighty per cent. of the usual cases of accidental poisoning may be prevented by the use of proper precautions. 4. Only one of the twenty-five cases was the direct result of ignorance. The committee made a number of practical suggestions; viz., that every one engaged in the practice of pharmacy, should make themselves acquainted with their profession; that a separate part of the shops or premises be set apart for dispensing prescriptions; that there should be a poison cupboard, with lock and key, in which should be kept all the concentrated and virulent poisons; that the labels upon all shop and store bottles be so placed that the whole of the label can be seen at a glance, on the plan introduced by Messrs. Ford and Shapland, of London; that, wherever practicable, every prescription be checked by a second person; that liniments, lotions, and all poisonous liquids be dispensed in bottles called "Merrikin's Caution Bottles"; that the more potent poisons should not be sold unmixed without a medical order.

**ROYAL COLLEGE OF SURGEONS.** The library and museum of the Royal College of Surgeons which have been closed during the past month, will reopen; the former this day (Saturday) and the latter on Monday. The statue of John Hunter has been placed at a cost of one thousand guineas, subscribed by the public, in the museum. Students should remember that registration in the college commences on Monday, and will remain open fifteen days. The preliminary examination for the Fellowship will commence on the 17th inst., and the professional examination on the 22nd proximo. The primary or anatomical and physiological examination for membership will commence on the 5th proximo, and the pass or surgical on the 12th. The Council has announced their Jacksonian prizes of twenty guineas each, for competition during the present year, in addition to the Collegial prize of fifty guineas, and two for competition in the ensuing year.

**MEDICAL PROSECUTION.** Dr. Goss was lately charged with having through negligence caused the death of a midwifery patient. Dr. Llewellyn and Dr. Gervis, who were called in to attend the case in consequence of Dr. Goss's absence, stated that the condition of the patient when they first saw her on the Saturday was one of great exhaustion, but neither of them was prepared to say that if Dr. Goss had procured the birth at an earlier hour of the day the final result would have been different. It appeared that Mrs. Brazier, the patient, had had four other children, all of whom died either at the time of birth or within a very short period after. Mr. Sleigh submitted to the learned Judge, after the evidence of Dr. Llewellyn and Dr. Gervis, that there was no case to go to the jury; and Mr. Baron Pigott having intimated that his opinion inclined in that direction, Mr. Orridge expressed, on the part of the prosecution, a readiness to relieve the jury from giving a verdict. The jury immediately returned a verdict of *Not Guilty*, accompanied, however, with the observation that they considered the defendant highly censurable for having left the lady at the time he did. Mr. Sleigh said that if the case had proceeded he was prepared to call on behalf of Dr. Goss not only a great number of his professional brethren, but also of his patients, who were ready to bear testimony to the care and skill he had invariably shown towards all who had sought his aid, and the anxiety he had always evinced for their welfare. But it should be recollected, said Mr. Sleigh, that the defendant had been from day to day in constant attendance upon other patients besides the deceased, till he was almost worn out with fatigue.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M. —Samaritan, 2.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

SATURDAY....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY. Obstetrical Society of London, 8 P.M. "Case of Casarian Section", by the late Mr. T. E. Bryant; Mr. F. J. Gant, "Post Mortem Examination of Case of Accidental Hæmorrhage"; Dr. W. Williams, "Missed Labour"; "On Spondylolisthesis", Appendix by Dr. Barnes; Dr. Shortt, "Deformed Arms".

## TO CORRESPONDENTS

\*.\* All letters and communications for the JOURNAL, to be addressed to the Editor, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

OUR readers will be very pleased to hear that Mr. Syme has promised to give the Address in Surgery at the next Annual Meeting of the British Medical Association.

NEW OPHTHALMIC JOURNAL.—On the 1st October, appears the first number of *The Journal of British Ophthalmology*, under the editorship of Mr. Jabez Hogg.

DR. W. M. BANKS, in his Edinburgh University Graduation Prize Thesis, gives a complete history (as far as it is at present known) of the Wolfian Bodies of the Fœtus and of their Remains in the Adult, including also the Development of the Generative System. This thesis does great credit to its author; and will, doubtless, be received with thanks by the anatomists of this country. In it are brought together for their benefit the labours of the many foreign writers who have investigated the above subject. The thesis is illustrated with many very good woodcuts, etc.

THE LANCET v. THE BRITISH MEDICAL JOURNAL.—G. L.—The case is simple enough. At no time of its history has the British Medical Association been more potential than it is at the present moment; and never was its prestige greater. Its JOURNAL has become a powerful rival to the *Lancet*. Through its uncompromising voice (of course, backed by the Association's force), consultations with homeopaths were put an end to. Through its voice, reform has been initiated in the Council of the College of Surgeons. In all directions, its force and influence are acknowledged and felt in the profession. During its present management, the members of the Association have increased in numbers from 1800 to upwards of 2400, and are still daily on the increase. Its pages are crowded with papers from the leading physicians and surgeons of the country. Naturally, therefore, at such a moment does the *Lancet* rage furiously; and, by a weekly publication of false statements, do its envious worst. Naturally, therefore—*i.e.*, true to its natural instinct—does it encourage anonymous writers to discharge their tales of woe against us. By this time, however, the profession sees clearly enough, as Mr. Pope told them in our last number, that the affair is simply and thoroughly a *£ s. d.* one.

A MEMBER OF THE ASSOCIATION asks of Mr. Carter, referring to his language in the *Lancet*: "Is he really a fit and proper member of the Association?" The following, which Mr. Carter no doubt considers the language of a model gentleman, is the passage alluded to:—"The *Journal* (that is, the Editor and his crew) will fight for its life like a rat in a corner, and will only be overcome by persevering and concerted action on the part of those who, like myself, regard it as a mere nuisance, devoted to the expression of unworthy sentiments, or illiterate and unwarrantable language."

DR. ALDIS, Medical Officer of Health, has published a pamphlet, entitled *London Noises disturbing Sleep*. Therein he shows how seriously both invalids and other inhabitants of the metropolis frequently suffer from nuisances in the shape of noises—such as cow-lowing, cock-crowing, etc.

F. R.—The account of Dr. Bree's *rencontre* with a former Editor of this JOURNAL, will be found at pages 463, 492, and 796 of the ASSOCIATION MEDICAL JOURNAL for 1855.

GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Dr. W. O. Markham (Clarges Street), £1.1; Dr. Geo. Yeoman (Whitby), 10s.; Drs. Lobb and Hogg (East London), £1.1; Wm. Williams, Esq. (Wareham), 7s.; Chas. Wilcox, Esq. (Wareham), 7s.; Ed. Mercer, Esq. (Wareham), 7s.

Amount previously announced, £61:3:6. Received at the *Lancet* office, £3:11.

I beg to take this opportunity of informing the Poor-law medical officers generally, that at the last committee meeting it was considered advisable that the above fund should be shortly closed. It is probable that the list of subscribers published weekly in the four medical journals for the last three months, may not have been seen by all who would wish to be thus included as testifying to and appreciating Mr. Griffin's worth. I would therefore crave a very prominent position in your next issue to make this forcible appeal to my Poor-law medical colleagues on behalf of the testimonial fund. I respectfully solicit that all intending subscribers will at once remit to me their contributions. We may then have a well-filled purse to present to our champion at the public dinner, to which it is intended to invite him in a few weeks' time at the Freemasons' Tavern, and of which all subscribers will be duly notified by printed circular.

I am, etc.,  
ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.  
145, Bishopsgate Street Without, September 26th, 1864.

PROPOSED EPITAPH FOR THE TOMB OF THE LATE BRAVE SURGEON OF THE "ALABAMA".

Weep not for him, but proudly hope that he,  
Died e'en as thou wouldst in thy small degree;  
Weep not for him, but emulate the brave,  
Who perish nobly in the hope to save.

Confronting death, Llewellyn's bosom knew  
This thought alone; his charge, the bleeding crew;  
Then spoke his spirit—"Tis not mine to fly,  
My place is here—here I will stay and die."

OLD LINEN.—A correspondent writes: "Is there any chemical or mechanical process by which new linen and cotton may be converted into what is termed 'old linen'?" I ask this question, as an hospital surgeon requiring old linen in greater quantity than what can be obtained by gifts.  
DE SCILLY.

THE LETTERS OF Mr. Jabez Hogg, E. L. O., and An Associate, shall be inserted next week.

COMMUNICATIONS have been received from:—SIR CHARLES HASTINGS; Dr. G. H. PRIDGON; THE HONORARY SECRETARIES OF THE OBSTETRICAL SOCIETY OF LONDON; Mr. T. SPENCER WELLS; Mr. W. PARKER; Dr. A. RANSOME; E. L. O.; Dr. JAMES RUSSELL; Mr. T. R. HEMSTED; Mr. R. GILLARD; Mr. THOMAS PAGET; MEDICUS; Mr. R. L. BOWLES; Dr. R. FOWLER; Dr. GRAILY HEWITT; Mr. J. F. HOLDEN; Mr. I. HARRISON; Dr. COOKWORTHY; Mr. BANGHAM; Mr. G. F. HELM; Mr. D. EVANS; Mr. T. W. CATTELL; Mr. D. STONE; Mr. JAMES RHODES; Mr. LOWNDES; and AN ASSOCIATE.

## BOOKS RECEIVED.

1. On a Form of Bronchitis (Simulating Phthisis) which is Peculiar to certain Branches of the Potting Trade. A Graduation Thesis. By Charles Parsons, M.D. Edinburgh and London: 1864.
2. Photographs of the Diseases of the Skin. By A. B. Squire, M.B. Number II. London: 1864.
3. Practical Anatomy: A Manual of Dissections. By C. Heath. London: 1864.
4. Principles of Human Physiology. By W. B. Carpenter, M.D., F.R.S. Sixth edition. Edited by H. Power, M.B. London: 1864.

5. Indication of the Paths taken by the Nerve. By L. S. Beale, M.B., F.R.S. London: 1864.
6. The Morality of the Human Race. By G. Pouchet. Translated and Edited by H. J. C. Bevan. Anthropological Society. London: 1864.
7. On the Womban Bodies of the Fœtus. By W. M. Banks, M.D. Edinburgh: 1864.

## ADVERTISEMENTS.

### Plymouth Public Dispensary.—

A SPECIAL MEETING of the Committee will be held at the Dispensary, in Catherine Street, Plymouth, on Tuesday, 23rd October next, at 8 o'clock precisely, to ELECT a PHYSICIAN in the room of Dr. SULLIVAN deceased.

Plymouth, 21 Sept. 1864.

ALFRED HINGSTON, Treasurer.

### Wanted immediately, a Resident

ASSISTANT, to Dispense, Keep the Books, and Visit occasionally.—Address Mr. BANGHAM, Ashby de la Zouch, stating age, references, and salary required.

### Medical Pupil.—A M.D., F.R.C.S.,

residing in a Country Town, whose Pupils have obtained High College Honours, has now a Vacancy for a RESIDENT PUPIL.—For terms, etc., address F.R.C.S., care of Mr. RICHARDS, 37, Great Queen Street, Lincoln's-inn Fields, London.

### Bath Mineral Water Hospital.

The situation of RESIDENT MEDICAL OFFICER having become vacant by the resignation of Mr. JOHN ROBERTS, the Committee will fill the appointment on Thursday, the 20th of October next.

Candidates must have Diplomas of the Apothecaries' Company and College of Surgeons, and are requested to send testimonials of their professional abilities and moral character (under cover) to the Registrar of the Hospital, before 12 o'clock on Thursday, the 13th of October.

The Hospital is exclusively for cases requiring the use of the Bath Waters, and provides 142 beds.

The duties are, to take charge of all the patients, under the direction of the Physicians and Surgeons, keep the books in the Medical department, maintain discipline, and perform the other duties usually required of such an officer.

A Dispenser (non-resident) is also employed.

The Salary is £100 per annum, with Board and Apartments in the Hospital.

Sept. 26, 1864.

BENJAMIN STARR,

Registrar.

### Classical and Mathematical.—

Dr. STEGGALL prepares Gentlemen for their Examinations in Classics and Mathematics at all the Medical Boards, viz., the Preliminary Examination at Apothecaries' Hall; the Matriculation Examination of the London University; Preliminary and Fellowship Examination at the Royal College of Surgeons, etc.

Dr. STEGGALL continues his instruction for all Medical and Surgical Examinations during the summer months.—Address Dr. STEGGALL, 2, Southampton Street, Bloomsbury Square, London.

### For Varicose Veins and Weak-

NESS. Very superior SURGICAL ELASTIC STOCKINGS and KNEE-CAPS, on a New Principle, pervious, light in texture, and inexpensive, yielding an efficient and unvarying support, under any temperature, without the trouble of Lacing or Bandaging. Likewise, a strong low-priced article for Hospitals and the Working-classes.

ABDOMINAL SUPPORTING BELTS for both Sexes, those for Ladies' use, before and after accouchement, are admirably adapted for giving adequate support with EXTREME LIGHTNESS—a point little attended to in the comparatively clumsy contrivances and fabrics hitherto employed.

Instructions for measurement and prices on application, and the articles sent by post from the

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The Profession, Trade, and Hospitals supplied.

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MEDICAL TRANSFER & PROFESSIONAL AGENCY.

50, Lincoln's-inn-fields, W.C.

### Mr. J. Baxter Langley, M.R.C.S.

MR. J. BAXTER LANGLEY begs to inform the members of the Medical Profession that he has undertaken the Medical Transfer and General Professional Agency business, till recently carried on by the late Mr. Bowmer.

Mr. Langley devotes his prompt personal attention to the negotiations entrusted to him, and treats confidentially and with care all matters relating to professional business. The strictest reserve will be practised in all the preliminary arrangements, and no expense incurred (except in special cases) unless a negotiation be completed.

The General Partnership and Commercial Agency business till recently conducted by him at his City offices, and his experience in the management of large commercial undertakings, combined with his professional acquirements, enable Mr. Langley to guarantee that all matters of business placed in his hands will be carried out without delay, and with an equitable regard to the interests of all the parties concerned.

Mr. Langley can refer to the Professors of his College, Members of Parliament, Clergy, Merchants, Bankers, and others, as a guarantor of his integrity and honour in all negotiations entrusted to him.

Full information as to terms, etc., sent free on application.

Office Hours, from 11 to 4; Saturdays from 11 to 2.

### Competent Assistants provided

without delay, free of expense to the Principals. No gentlemen recommended whose antecedents have not been inquired into. Apply to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

### Locum Tenens, of high quali-

fications, reliability, and good address, can be despatched by an early train, after receipt of letter or telegram, stating terms, duties, and qualifications required. Fee, 10s. 6d.

### Medical Assistants.—Wanted

Immediately, several competent In-door and Out-door ASSISTANTS, qualified and unqualified, for Town and Country. No charge for registration, but references in all cases required. Apply to Mr. Langley, 50, Lincoln's-inn-fields, W.C.

### For Transfer, an excellent

COUNTRY PRACTICE in Somersetshire, income £300 a year. Appointments £50. Only one opponent, with whom a partnership could be arranged if desired. House, stables, garden, etc. Rent £35. Vendor has received a foreign appointment and must leave. Address "990," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

### For Sale, a sound Practice, in a

Village containing 2000 inhabitants, within a mile of the sea, and in the neighbourhood of a good county town. Average receipts over £100. Appointments £125. One horse only required. No assistant kept. Few bad debts. One opponent, without English qualification; no other medical practitioner within four miles. Good house and excellent garden, with conveniences. Rent £26. Terms easy. Address, "S. 969," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

### For Sale, a good Family and

GENERAL PRACTICE, in one of the best towns in Lincolnshire. The locality is healthy and well populated (10,000). Opposition declining. Average receipts £360. Appointments £70. One horse only necessary. Commodious house, etc. Rent £40. Terms, one year's purchase, payable by instalments. Address, "S. 957," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

### Unopposed Country Practice for

Sale. Income over £300. Appointments upwards of £60. Established 15 years. Address "S. 991," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

### Yorkshire. An unopposed

COUNTRY PRACTICE for sale. Receipts £400 a year, increasing. Appointments £150. The vendor is confident that every patient can be transferred to a fully qualified man. Premium, one year's purchase, payable by easy instalments. Address, "S. 997," Mr. Langley, 50, Lincoln's Inn Fields, W.C.

### Eligible Investment. A leading

Practitioner in one of the best towns in the West of England, is willing to dispose of a Branch Practice, established and conducted by him for nearly twenty years. The complete transfer of the whole can be guaranteed to a suitable gentleman, of double qualifications, a large proportion of the revenue being from appointments, the succession to which can be secured. Receipts last year, £362:10:5 Terms liberal. Address, "S. 994," Mr. Langley, 50, Lincoln's Inn Fields, W.C.



# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

### ON THE NEED OF COMBINED MEDICAL OBSERVATION.

By ARTHUR RANSOME, M.B., Bowdon, Cheshire.

BEFORE an assembly of medical men, it will not be necessary to enlarge upon the importance of wide observation of the phenomena of disease as a basis for the most difficult though most important of the inductive sciences. Not only is this truth fully recognised, but it would appear, at first sight, that every possible effort is made by the profession to extend their researches into every branch of natural science.

It is true, that the members of our body are not wanting in that zeal and activity which at the present day animate every other department of human learning; and the results of their investigations are widely spread, for the public good, through the many channels furnished by lectures, by such associations as our own, and by the periodical press.

All the most curious and rare forms of disease are thus brought to light and carefully studied. Eminent men connected with hospitals contribute the results of their experience in the treatment of intricate or dangerous cases, and give their opinion upon difficult questions of diagnosis or pathology. In truth, our officers fight well; but the rank and file of the profession, men trained to observe, and thoroughly capable of giving material aid, yet find no direction pointed out in which they might also push on the advance of their science.

There still remain to be gathered in many items of observation, each by itself apparently unworthy of record, and too unimportant to advance the reputation of any one, which, when massed together, would form a most valuable store of evidence. It is by the patient accumulation of facts, in themselves insignificant, that meteorology has been able to advance so rapidly of late, and has reduced to laws some of the apparently most uncertain phenomena of nature. Medicine also has numerous problems of this nature awaiting solution, and needs all the help she can find. Many medical truths can only be established by the concurrent testimony of many witnesses. It is the object of this paper to suggest that the organisation of this Association should be employed for the purpose of gathering in evidence of this description. Hitherto this Association has existed, and has worked, chiefly to afford mutual support and strength to its members. I would suggest that we ought not to be content with this as our sole object; but, like an organ of the body corporate, we should labour to store up and utilise those materials which it is the special function of our profession to prepare. The objects of this inquiry would be of this kind—

1. To ascertain, by means of numerical returns, at sufficiently short intervals of time, the rise and progress of various diseases in different localities.
2. To obtain well-authenticated evidence of the duration of the contagion of the several infectious diseases.

3. To gather facts bearing upon the natural history of disease, or throwing light upon the relations existing between different symptoms.

4. To collect observations, carefully made, upon the action of remedies.

*Registration of Disease.* It will be allowed, that as yet we know very little about the more remote and recondite causes of disease. We know at present scarcely more than was known to the founders of medical science. It is remarkable, for instance, how truthful are the observations of Hippocrates and Sydenham upon the connexion between seasons and the various epidemics. This accuracy seems to have been attained simply by careful individual watchfulness; and so far we have done but little of greater value. Before reliance can be placed on any observations upon the rise and progress of disease, we must have much more precise and extended information than any one man could possibly collect. What is needed is a regular record, at sufficiently short intervals, of the number of fresh cases of various diseases occurring in different localities.

The returns of deaths received by the Registrar-General neither fix the time nor the place at which any particular case occurred; and thus, however valuable they may be in other respects, they avail nothing for our purpose. It would probably be impossible to obtain an exact return of all the diseases arising in a community; but, for the purpose of observing the fluctuations in the course of disease, this complete return would not be necessary. What is required is a return sufficiently steady and sufficiently extended to give approximately the relative amount of different diseases.

The following very simple method, which has already been tried for four years with complete success by the Manchester Sanitary Association, was approved last year by a Committee of the Council of the Lancashire and Cheshire Branch of this Association. This Committee considered that a weekly registration of deaths, and of the relative amount of certain kinds of disease, might be carried out without much trouble or expense in all the chief towns of the district, and they recommend the following steps to be taken.

"That, in each large town, a small committee should be formed, of gentlemen interested in the subject, who should invite the assistance of all those medical gentlemen in the town or neighbourhood who hold public appointments, whether to hospitals, gaols, workhouses, or Poor-law unions. Exertions should be made to enlist all such public medical officers, so that the returns might represent as accurately as possible the relative amount of disease prevailing in the community. At the same time, the co-operation of the registrars of deaths should, if possible, be secured, so that returns might also be obtained of the total number of deaths occurring each week.

"Each gentleman consenting to contribute to such a return should be furnished with a set of forms, to be by him filled up with the number of new cases of the different diseases therein mentioned which had come under his care in the week preceding. The deaths, also, which had occurred during the same period, should be entered in the column provided for them.

"These returns, when filled up, could then be posted to the address of any one member of the local committee who would undertake to receive them, compile them into a single return for the district, and then forward them to the central offices of the Association in London."

The Committee state, that "the expense of carrying out this scheme would be almost confined to the

printing of the forms, and their postage from the various contributors (about six shillings a year for each separate return). Many inhabitants in each town would be willing to subscribe a small sum for the sake of possessing such valuable records as these would be likely to prove."

It seemed certain to the Committee that many valuable results would follow the establishment of such a systematic registration of disease as would record weekly the relative amount and kind of disease prevalent at any one time in all the chief towns of a district. "It would show the influence upon sickness of the varying conditions of climate and season, of prosperity or distress, of the trades and manufactures, or of any other circumstances peculiar to the district. It would afford a means of speedily detecting the advance of an epidemic, and of studying its course; and thus it would be most valuable to the inhabitants of the several towns comprised within the district in which it was made, giving them exact and timely intelligence of the presence of disease, and enabling them promptly to deal with it."

It will be seen that no attempt is here advised to obtain a complete record of all the cases of disease which arise; and it might hence be objected, that the results given will be incomplete or even fallacious. It is found, however, that the constituency from which returns are sent remains for the most part tolerably constant; and thus, at least, the relative proportions between different diseases may be obtained, and compared also with the deaths from those diseases occurring in the practice of the reporters. Thus not only is the progress of disease made manifest, but its fatality can be found; and when this return of deaths is compared with the official register of *all* the deaths occurring in the community, we can both gather from the comparison an approximate estimate of the total amount of disease, and also can judge upon what classes of the community the disease presses most heavily.

Every week, for the last four years, returns of the kind just described have been made to the Manchester and Salford Sanitary Association, by the voluntary labour of thirty-nine gentlemen, medical officers to Poor-law districts, and to other public and charitable institutions in the neighbourhood. During the last three years, only one contribution to this series of returns has been omitted—one out of more than six thousand returns. Occasional delays have occurred; but usually the return is published in the week following that for which the returns are made.

These facts not only prove better than any words the practicability of the undertaking, but they are in themselves a most forcible testimony to the public spirit of the profession. I may mention, also, that Mr. Brown of Preston has commenced a similar effort in his town.

**Durability of Contagion.** The question of the duration of contagion is one of extreme practical importance to every general practitioner. He is frequently called upon to pronounce judgment upon the point, without any sufficient grounds upon which to base his opinion. He can only call to his aid his own experience, and that, perhaps, of a few medical friends. He has no evidence to which he can refer in case of need. The result is, that upon this subject the most various opinions are given by different medical men; and thus constant annoyance is caused to medical attendants, and loss of confidence in them is experienced by the patients.

We require to know both the possibility and the degrees of probability of contagion from patients recovering from infectious disorders, after certain periods of time have elapsed from their seizure; and

it is likely that some difference will have to be noted between the duration of contagious power in the body of the patient, and in the clothes or other fomites.

These are practical points, upon which all who possessed the necessary evidence would gladly give it up to an influential, well-organised commission; and, after a time, the whole question might be settled, to the great satisfaction both of the public and of the profession.

**Observations on Disease.** These would constitute the most difficult part of the inquiry, and would need great care on the part of those who propounded questions on the subject, as well as accuracy in those who gave the answers. Moreover, it would only be in a limited number of cases that the method of question and answer could be of any service. Any attempt to supersede the careful noting of individual cases would be most unwise and unscientific. Still, in some instances, the questions would lead to direct observation; and, for the purpose of testing the correctness of certain views, or of ascertaining the frequency with which symptoms concur, this means of inquiry might well be adopted, and might eventually guide us to a more complete knowledge of the causes of certain symptoms, and might suggest new paths of inquiry by observation. Thus, the true gravity of albuminuria as a symptom—its meaning in different diseases; the connexion between erythema nodosum and rheumatic pains, as mentioned by Trousseau; the import of subclavian murmur as a sign of disease—all these are instances of the kind of questions which might be solved by an appeal to the experience of the profession.

**Action of Remedies.** The work of testing the action of remedies would be one of vast magnitude, if it were to include the proof of every agent introduced to us as a medicine. Even to try fitly a small number of the weapons of our armoury will involve a large expenditure of time and energy; and yet, unless we are content to remain in our present unsatisfactory state, and to lag behind all other sciences, the work must soon be entered upon. We are greatly in need, at the present day, of a new sect of the Empirics, who would, in the true sense of their title, bring their remedies to trial, and subject them to experiment.

Now, first, what amount and kind of evidence ought we to possess respecting the action of any therapeutic agent?

Let any one consider the difficulty that there is in ascertaining the true action of any one remedy upon the body. The complexity of the problem is so great, the disturbing forces so many, and the dangers of misapprehension of facts so constant, that experiments must be multiplied manifold before we can assume that we know how a medicine may be expected to act. Before any sound conclusion can be arrived at on this point, we must be provided with numerous observations by trained observers, both carefully made, and so widely and variously applied as to do away with the possibility, or at any rate, probability, of error on the score of individual bias or idiosyncrasy on the part of either attendant or patient. Confidence in the efficacy of a remedy will only be just and well founded when its effects have been noted in many thousand cases, and when a record has been made of the distinct changes in the symptoms which can be traced to its employment.\* How many of the remedies at present in use have re-

\* It may be added, that this notation will be much facilitated when certain simple signs can be agreed upon as necessary to be observed in each case, and when changes in the temperature of the body, and in the amount and nature of the several secretions, can be readily ascertained.



ceived this searching trial? Let any one reckon up the value of the testimony upon which he proceeds to use any therapeutic agent.

It is true that there are some medicines which have been handed down to us with eulogy from one age to another, which have the general consent of the medical world in their favour. Our confidence in them is probably a most just one, and would only be confirmed by any more searching proof than our own individual experience; and yet we find continually that their efficacy is challenged, not only by our opponents—the Arabs of the profession—but the accusation is echoed from our own ranks.\*

The fluctuations of opinion upon the merits of different remedies show the absence of the safe anchorage of trustworthy evidence. I need scarcely adduce, as an example, the changes of opinion with respect to blood-letting; contrasting the almost terror with which it is now regarded with its excessive and unjustifiable use in times past.

It may be said that, after one or two such ebbs and flows in the tide of opinion, we should gradually settle down to a rightful appreciation of the value of our *materia medica*. But, besides the objection, that this would be a most rude and unscientific manner of solving our difficulties, it is very doubtful whether they would ever in this way right themselves. It is the habit of the age to distrust all mere tradition, to doubt all hearsay evidence; and thus, unless the proof remains patent and incontestable, what has been considered settled in one century comes again under discussion in the next.

Our improvidence in wasting the observations of our members is especially noticeable in regard to the trial of new remedies.

A new therapeutic agent is generally introduced to the profession by some man of eminence, who publishes his own approval of it, and perhaps supports it with the record of a few cases in which it has been tried with success. If these cases had been properly selected, and noted with discretion, they would probably afford sufficient *a priori* evidence to justify the further proof of the remedy by the profession at large; but here, as a general rule, the matter ends; no more evidence upon the subject is stored up for future reference, and many valuable observations are lost.

The remedy is probably used by many men who have been disappointed in the action of the ordinary means of treatment, or by those who make a practice of experimenting with new medicines whenever they have an opportunity of doing so with safety; but these observations are seldom recorded. They are thought too scanty or unimportant to allow a special paper or treatise to be composed upon them; and the result is, either that a worthless medicine is used over and over again to the exclusion of more effectual weapons, or, if it be really valuable, it may drop out of sight, or be a very long time before its value is recognised.

The medicine may remain in repute in one district, and go out of use entirely in another, according to the temperament of the medical men of the place. There are some men so sanguine, that they will

ascribe every recovery from illness to the remedies last employed; whilst there are others so sceptical that, whether of death or cure, they say alike, "Twas Nature did it."

An attempt has already been made by the managers of our JOURNAL to carry out a Therapeutic Inquiry, and the effort demands our warmest support. But the work ought not to be left to them; it should have the sanction, and, if necessary, the active support, of the governing body of the Association. For complete success, also, it needs personal solicitation for observations. Gentlemen should be appointed to call upon the members to ask their help, and to explain the nature of the undertaking.

It is probable, that a large portion of the work now sketched out could not be performed by our own central body; part of it might be better left in the hands of the supreme Medical Council. The determination of this point, however, might well be left to the consideration of a subcommittee. I would propose, therefore:

1. That the central governing body of the Association should appoint a working committee, who should foster the registration of disease, and devise the best means of obtaining the evidence of members upon questions having a practical bearing.

2. That the Council should request the co-operation of all the members of the Association, in giving answers to the questions proposed to them.

3. That the Council should appoint certain members to visit medical men in the several districts, and appeal personally to them for assistance; and to obtain answers upon the several subjects requiring elucidation.

It may be well here to anticipate some of the objections which may be raised to the scheme now proposed.

In the minds of some there is a profound distrust of the value of any statistical inquiry into medical subjects; and although the researches now contemplated would be only partially susceptible of a numerical arrangement, yet this feeling might lead them to object to the plan.

This distrust arises from these sources. 1. Collections of figures have been handled so as to bring forth erroneous, and even contradictory, results; and 2. They have been applied to questions which could only be solved by careful individual observation.

This argument, however, only bears upon the mode in which the instrument of statistics is used. It might be, and indeed has been, applied with equal potency to discourage the use of the microscope. It will be found, I believe, upon examination, that the objects now sought by this means are strictly and legitimately within its scope.

Another objection springs from a doubt of the uniformity in the powers of observation in the contributors to such an inquiry. And yet this is also a perfection which clings to every form of scientific evidence, and it is one which must be borne by who attempt to collect it, whether they are lawyers, or men, or medical men.

Our witnesses, however, are men accustomed to observe, and to test the evidence of their senses; trained to hesitate before they form their opinion. The average ability of members of our profession is at least as high as that of any other body of men, and their judgment might be relied upon with confidence. In any case, many of the objects sought after would not require much discrimination. The recognition and enumeration of the different epidemic disorders would be one of the most important of these objects, and would not need much skill.

The difficulty of obtaining the required information from men already heavily burdened, would, perhaps,

\* Dr. Paris, in his *Pharmacologia*, observes: "It is impossible to cast our eyes over such multiplied groups (of medicinal substances) without being forcibly struck with the palpable absurdity of some, the disgusting and loathsome nature of others, the total want of activity in many, and the uncertain and precarious reputation of all, without being eager curiously to inquire, from the combination of what causes can it have happened that substances at one period in the highest esteem, and of generally acknowledged utility have fallen into total neglect and disrepute."

Dr. Gregory, quoted in Sir W. Hamilton's *Discourse on Revolutions in Medicine* says: "There is no one disease nor any one remedy that has not been the subject of obstinate controversy."

be the most serious impediment in the way; but if the questions were proposed by gentlemen in whom the profession have confidence—if they were of a simple description, and had evidently a practical bearing—we should, I feel sure, again have proofs of the public spirit and self-denying energy of our profession, and a collection of true archives of medicine would be the result.

## Illustrations

OR

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### BIRMINGHAM GENERAL HOSPITAL.

LOSS OF SPEECH, IN CONJUNCTION WITH SUSPENSION OF CERTAIN OTHER FUNCTIONS OF THE BRAIN, FOLLOWING AN EPILEPTIFORM ATTACK.

Under the care of JAMES RUSSELL, M.D.

THE following cases are presented as a postscript to my paper in the JOURNAL of July 23rd, on Loss of Speech in connection with Hemiplegia, though they offer no analogy with the cases in that paper, excepting in the prominence among the symptoms held by speechlessness; the cause of the disease, and the attendant conditions being entirely different. They exhibit a very remarkable condition of suspended activity on the part of particular functions of the nervous centres, apparently unconnected with any organic change in the centres themselves. They also afford a very striking illustration of the independence of the different functions of the nervous centres, and of the perfect limitation which may be effected in the operation of morbid action in so complex an organ as the brain; the performance of certain functions being, for a time, entirely arrested, whilst the others remained entirely unaffected.

I alluded, in my former paper, to the limitation in the action of organic disease upon the brain, as occasionally exhibited, in a still more remarkable manner than in the abolition of motion or speech; a single class of words, as a particular language, being alone forgotten; and as connected immediately with my present subject, I may adduce the following illustration, derived from the operation of disease not involving structural change.

A girl, aged 6 years, was seized with an epileptiform attack, which lasted severely for an hour; but the convulsive movements did not subside for two hours afterwards. She lay afterwards in a semiconscious state, restless, and at times partially maniacal, until the evening of the following day. As she recovered from this condition, her memory was found to be generally impaired, but especially so as applied to speech; the patient presenting an excellent illustration of that form of defect of speech which depends upon impairment of the mental element concerned in that function. The motor and sensitive functions were entire, with one exception; and her intellect, in all other respects, was speedily restored; but the period of her life antecedent to her attack was, for some time, a perfect blank; though, by degrees, a few events emerged from the darkness. During the first day or two, every desire was expressed by the words, "I want." Afterwards, as she found language, her sentences became incoherent after the first words. She also misapplied terms, unfortunately, in one particular, always calling her uncle "donkey"; her forgetfulness of appropriate words was so complete that

she often did not recognise them when presented to her, so that she could not be prompted. She had always been a sharp, clever child, fond of reading, and had written two letters on the day preceding her illness; but she was now found to have lost entirely the power of reading and writing, and had to begin again with the very elements. In re-learning her alphabet, it was observed that there were particular letters at which she always halted, and she shook her head, even when they were pronounced to her, being apparently unable to catch the sound. She applied herself with much diligence to regaining her lost ground; but her progress was very slow, and ten months afterwards she had not recovered her former position. It is now eighteen years since these events occurred; the patient has continued in perfect mental health; but I am told by her father that even now she is apt to be a little confused if she speak too rapidly.

One circumstance remains to be noted, of much importance, as regards the statement by Dr. Jackson which suggested my former paper, that the attack left a weakness in the right arm; so that for some time she used the left hand in preference to the right. It must also be added, that her grandfather suffered, in advanced age, from some form of cerebral disease, which destroyed his memory for words; and that her family exhibits a marked proclivity to derangement of the brain.

But there are instances of a much wider suspension of the functions of the brain than occurred in the preceding case, associated with epileptiform disease, or independent of it. Thus, Dr. Carpenter, in his *Physiology*, quotes the case of a man in whom the entire intellectual powers were placed in abeyance "almost instantly", for a period of five years, in consequence of mental distress, and were "then recovered completely, and rather suddenly." A more extraordinary case is the one detailed by Mr. Dunn (*Lancet*, November 1845), and also referred to by Dr. Carpenter. It bears a close analogy to the cases I have to detail, though very superior to them in interest. Like them, the suspension of cerebral power immediately followed a fit of an epileptiform character, and the symptoms were much modified by the recurrence of the fits. The case also presents the limitation of diseased action to particular functions of the brain in a still more striking point of view; the mental faculties of the patient were suspended in their exercise; and of all the senses, sight and touch alone remained, constituting the sole medium of communication with the outer world. Recovery was effected in different periods of time in the case of the different functions; one or two words were spoken four months after the commencement of the illness, but the patient's vocabulary remained very scantily furnished for eight months longer, when speech was at once fully restored under the influence of emotion; the sense of hearing continued quite lost ten months after all the other senses had been regained. It is to be noted that intense emotion was concerned in promoting the recovery of the lost functions.

The following cases will be seen to present considerable analogy with those which I have quoted, retaining, however, certain points of difference.

CASE I. Samuel Price, aged 32, married, stamper. When seen on the day following that of his admission, he was lying on his back, apparently asleep; his eyelids were stuck together by dried mucus, and it was stated that they had not been opened for four days; when separated, the cornea was drawn upwards so as nearly to conceal the pupil. He had not spoken since his attack, four days before. His condition, noted on several occasions during the following forty-eight hours, presented the following remarkable characters. He evidently possessed a certain amount of conscious-



ness; he sat up in bed and fed himself when food was placed in his hands; given a cup of milk, he raised it properly to his mouth. When addressed, he directed his eyes to the speaker, and obeyed instructions immediately and intelligently; the nurse strongly enjoined him not to wet his bed, and, as she believes, in consequence of her injunctions, he gave indications of his needs. Notwithstanding this evidence of consciousness, he appeared quite insensible to pain; it was impossible to elicit any evidence of common sensation; most severe pinching, pushing the point of a knife into his skin, the application of a spoon dipped in boiling water, pulling his whiskers, thrusting a pin behind the finger-nail, produced no sign of sensibility—not the least change in the expression of face—nothing, in short, but a few inconsiderable muscular movements in the limb which was assailed. A roll of paper rested on the cornea without inducing winking; but when a pen was introduced into the nostril, or passed down the throat, considerable movement of the head and neck and attempts at retching followed. Power of voluntary movement remained, and muscular resistance was opposed to passive movement. On the day after his admission, he got out of bed when ordered; but his walk was very unsteady. He resisted the introduction of the spatula into the mouth; and whilst we were thrusting a pen into his nose, he raised his hand, as if to thrust it away. The raised limbs, when dropped, were evidently controlled by the muscles. The pupils acted freely; the right was rather larger than the left.

He was a small made man; the expression of face very deficient in intelligence; his head was small; his forehead receding. The history which was obtained was as follows. He had been subject to fits, apparently of epilepsy *mitior* since he was nine years old; eight years ago the fits became much more severe, and were attended by fully developed epileptic phenomena; he always fell on the left side. At that time, when the fits had assumed a greater severity, he was left by one of the fits in the same state as on the occasion of his coming under my care; he then also lost power over his left limbs. He was in the Queen's Hospital for sixteen weeks, and when he left, could only speak a little; he then entered the General Hospital, but it was two months before he walked without a stick; the arm recovered before the leg. From the date of this illness to the time to which the present report refers, the fits became again much slighter, and continued so until eight days before his admission into the hospital, when three fits occurred; he continued to work during the following three days, though he was rather dull, but on the fourth day he was found speechless in bed, and then was brought to the hospital.

The day of his admission was October 28th, 1861, and it was November 16th before any distinct improvement had been effected in his condition. On October 30th, he was found waiting for his tea, having indicated by signs, the state of his appetite; after his meal had been brought, the bread was removed; he then ceased eating, but being desired to go on, he felt for his bread, picked it up, and proceeded with his meal. He signified his desire to eat by pointing to his mouth; desiring to be led to the lobby, he shook a partition by his bedside. He pointed to his throat as the seat of some supposed malady, and put my finger into his mouth, but nothing amiss could be discovered. He was told that he should have no more food until he asked for it; he held up his hands imploringly, and pointed to his throat; a day or two afterwards, an attempt was made to carry the threat into execution, but he made so great a disturbance by shaking his bed, and in other ways, that food was at last given; and on a subsequent occasion, under simi-

lar circumstances, he made some noise in his throat with great effort, pointing to that part as the seat of difficulty. All this time the special senses were active, and apprehension was quick; hearing our comment upon one pupil being larger than the other, he indicated that he had suffered a blow on the eye, by pointing first to the eye, and then to a bottle, supposed to be the instrument with which the blow had been inflicted.

His sensibility to tactile impression was again tested, by pinching till a blush of inflammation appeared, and by as strong a shock as could be procured from a battery; asked if he felt anything? indicated yes; if he were hurt? shook his head. The earliest approach towards speaking was in some guttural sounds on Nov. 3rd; and during the utterance of these sounds, his face wore an expression of great anxiety to succeed; four days afterwards, an attempt to alarm him by ordering his back to be fired, caused much apprehension, and a fair imitation of the words, "I don't want it"; but his conversation was merely a series of "Tut" "tat" "tut," uttered with great gesticulation, and a very earnest expression of countenance. On November 16th, he said distinctly, "Getting better, thank you," and on the 28th talked freely, and almost intelligibly. The last notice of sensation is on November 7th, when it remained defective on the left side of the body, and to a slighter degree, on the left side of the tongue and face. His left leg was unable to support his body in walking, though he moved it freely when lying down; its girth was below that of the right. He left the hospital on December 28th, using a crutch, but some time afterwards was seen walking in the street actively and well.

His urine deposited phosphates on boiling.

The following case, which affords an interesting companion to the preceding, occurred under my notice in King's College Hospital, in the year 1843, in the practice of the late Dr. Todd, at the time when I was physician's assistant at that institution.

CASE II. Thomas Russon, aged 13, was brought to the hospital by the police, in the middle of the night; he had been found in a coffee-house, speechless. I afterwards learnt that he had suffered from an epileptic fit two years before, that he remained unconscious for four days after that fit, and was unable to walk or to speak. He then recovered perfectly, and had no return of his malady. The circumstances attending the second attack were never known.

I found him upon a chair, with his eyes open, but his countenance void of expression, and quite motionless. He had walked to the hospital between two policemen, and walked up to bed, supported in the same manner, though his legs seemed scarce able to support his weight, and his feet were hardly raised from the ground; but so long as he remained in the surgery, he did not make the slightest change in his posture. His pupils were somewhat dilated and undilated when a candle was held near the eye; his conjunctiva was rather injected. The functions of circulation and of respiration were performed naturally.

No stimulating had the slightest power to rouse him, nor were we able to elicit the slightest proof of sensibility, though he winked his eyes naturally, occasionally moved the globes from side to side, and opened and closed his jaws at regular intervals.

On the next morning, he was rolling about in bed, and occasionally moved his arms as if fighting; the sole evidence of consciousness was afforded by his turning his head towards the speaker, and opening his eyes with an unmeaning stare, except that he winked when his eye was touched, but not when an object was held before it. He had not uttered a

sound. His bladder was distended, and required the use of a catheter; and in the evening, a stool was passed involuntarily. His urine was natural in its character. He assumed for the night a comfortable position, with his hands under his head, and occasionally aimed a blow with considerable force.

On the second morning, a catheter was again needed. The same complete insensibility to impressions on his skin was manifested, though he made wry faces at a senna draught, and tried to spit it out. He winked when his conjunctiva was touched, but seemed insensible to the heat of a candle, and to other tortures. He endured strong ammonia beneath his nose for some time; then turned aside his head, and his left eye watered. Various expedients to test the reality of his symptoms entirely failed in affording any justification for doubt. When placed on his feet, the body and limbs became stiff; he made automatic movements of his jaws and tongue, as though he were chewing; occasionally his eyes became fixed, his head was raised, and his jaws were snapped; or he struck wildly about him. His pupils remained as at his admission. In the night, he passed urine and stools involuntarily.

On the following morning, the patient unexpectedly made signs that he wished to write; and, having been provided with materials, he proceeded to give an account of himself, told us that he was subject to fits, and inquired where he was. He appeared to write mechanically, for his gaze was perfectly inexpressive; and, when a book was placed between his eyes and the paper, writing went on precisely as before. It is added to the report, that he neither saw nor heard, and trusted entirely to touch; the evidence is not given, but it satisfied Dr. Todd. He begged for food in writing, snapped at it, and devoured it most voraciously; but he also ate and swallowed paper in the same manner, when substituted for the meat. Nevertheless, he gave evidence of greater sensitiveness to tactile impressions, struggling violently when flipped with a towel, and striking aimlessly about him. When, at his own desire, he was placed on his feet, he tried to advance his legs but fell heavily on the bed.

In the evening of the same day, he had recovered vision; and in the following morning was found reading, making frequent reference to another book connected with the one he was perusing. He kept up an active conversation by means of a slate, and related the particulars of his former attack, informing us that on that occasion also he lost his voice. He was visited by his father for the first time since his admission, but he showed little emotion; nor did he appear much affected by his condition, excepting on one occasion, when he burst into tears at being asked if he could speak. He had recovered fully the power of walking; he was, however, childish in his manner, laughing, and looking at everything, apparently with great surprise, and his memory appeared defective.

He was discharged on the seventeenth day, not having spoken a single word when awake, though he had been heard repeatedly to talk in his sleep. No artifice succeeded in obtaining a single sound. "He was desired to roar, to squeal, to make any noise he liked: he merely opened his mouth, expired rapidly and forcibly, and shook his head." He seemed to have forgotten the mechanism of speaking, and not to know how to set the vocal apparatus in action. He was also perfectly deaf. Various plans were tried to ascertain if any portion of the sense of hearing were present, but with an entirely negative result: he did not even *feel* when one roared in his ear.

It was reported afterwards that the patient recovered the power of hearing during a Mesmeric

*séance*, and, in three-quarters of an hour after, speech also. Some time subsequently, I was told that he had died in a fit.

In speculating on the cause of the remarkable symptoms present in the foregoing cases, we are led, both by analogy and by the nature of the attack which introduced the disorder, to refer to the cerebral disorders which present themselves in the course of epileptic disease. Here impairment of function is more liable to occur than perversion. Memory is the function most frequently affected in the course of epilepsy, though the result of my own experience quite agrees with Dr. Reynolds's opinion, that if we exclude epileptic cases associated with organic disease, and also those which deviate in some marked manner from the ordinary type, serious loss of memory occurs in a minority only of cases of epilepsy. In explaining the suspension of cerebral function which I have been describing, we cannot help referring to the complete and instantaneous annihilation of consciousness which forms so striking a feature in the epileptic fit, and to the cause on which this phenomenon is supposed to depend; namely, the spasmodic contraction of the minute arteries. Dr. Jackson has suggested the probability of there being definite arterial regions in the brain which may be separately affected in a fit of epilepsy. The cases I have now quoted point also to what is a very probable sequence of Dr. Jackson's hypothesis—definite functional regions, associated with the particular arterial divisions.\*

But some more permanent change in the nutrition of the ganglion groups involved in the disorder, beyond the passing condition connected with the epileptic paroxysm, is necessary fully to explain all the phenomena in these cases; such a change doubtless arose out of the spasmodic contraction of the cerebral vessels incident to the fit. Dr. Brown-Séquard, indeed, seems to contemplate the possibility of very protracted spasm of the blood-vessels under certain irritations;† but even should we admit such an explanation in the two principal cases I have narrated, it could hardly apply to the one with which I commenced this paper, in which the nutritive change was permanent.

It is, however, open to doubt, whether the ill may not have been in part in fault in the last case, at least in the later stage, since the patient recovered speech in sleep, and plainly preserved his memory intact, whilst no paralysis was present to prevent articulation. It is also to be noticed, in re-

\* The following description of an epileptiform attack, given me by one of my hospital patients, has a direct bearing on the suggestion of Dr. Jackson. It would even seem in this case as though the spasm affected single arterial branches of the smallest order, distributed to particular ganglion groups, passing in succession from one branch to another. The fit here described was the only one from which the patient suffered, but it had recurred with some frequency for many years.

He is "seized with the wind" very badly; then dimness comes in his left eye, and on closing it, the dimness passes to the other eye. As the dimness of vision ceases, the patient feels numbness in the little and ring finger of the right hand; the numbness then leaves these fingers, passing up the arm to the lips, which feel as though a string were tied round them, drawing them together. Then the numbness leaves the lips, and affects the end of the tongue. From the tongue, the sensation proceeds to the left temple, extending thence to the back of the head. During the time the fit is upon him, he does not lose consciousness, but cannot speak; it leaves him drowsy, and unable to walk steadily.

† "The blood-vessels, like muscles of animal life, may have spasms, as well as they may be paralysed. . . . A section of a lateral half of the spinal cord near the medulla oblongata produces this curious effect; on the side injured, the blood-vessels of the extremities are paralysed; while on the opposite side they are spasmodically contracted. Very often the spasm persists for days, and after temporary relaxations it usually reappears for many hours. . . . If we have time, we will try to show, in another lecture, that this spasm of blood-vessels is the cause of the coldness of the feet and hands in epileptics and certain paralytics." (*Lancet*, 1858, vol. ii, 413.)



ference to a previous question, that in the first case, with speechlessness, there was paralysis of the *left* leg; but, on the other hand, there was no proof that the loss of speech depended on defect of memory. In the case which I described at the commencement of this paper, with impaired speech from defective memory, paralysis was present on the *right* side.

## Introductory Lectures.

### ST. THOMAS'S HOSPITAL.

DR. CLAPTON, Dean of the School, delivered the Introductory Address, on October 1st.

After a few remarks, the lecturer paid a high tribute to the memory of Mr. Joseph Henry Green, the late consulting-surgeon to the hospital. He then addressed himself especially to those gentlemen who were about to commence their hospital career, and gave them much good advice and exhortation. He did not disguise from them that they had before them many a laborious and tedious day, many a night half spent in study, and many an anxious hour before presenting themselves for their examinations; and, at the same time, he impressed upon them the necessity of avoiding that undue ambition and immoderate ardour in their studies which too often lead students to neglect and injure their own bodily health. He recommended them to take advantage of the opportunities afforded them of obtaining healthy recreations and manly amusements in the intervals of their studies, as well as agreeably recruiting their minds by various scientific and literary pursuits, as conducting, both to a healthy state of body, and to that vigorous exercise of the mental faculties for which there is such a heavy and continuous demand in every medical man.

The lecturer then entered into details relative to the duties of first-year's students; recommending them in what way they should pursue their studies, and make the most of the great advantages and opportunities which the hospital offered them. The subjects of the first winter's course of lectures were more particularly alluded to; viz., Anatomy, Physiology, and Chemistry. He urged them, even from the first, to pay earnest attention to the bedside and the practical part of their profession; for that it is only by properly combining principles with practice that one can ever hope to become a scientific and successful practitioner. The students were then exhorted to work together as much as possible; and, at the same time, were warned against forming friendships with the vicious and idle. Nothing was more gratifying than the immense improvement in the character and *morale* of medical students of late years—a circumstance which was, in some degree, attributed to the gradual alterations in medical education.

The lecturer then spoke to them of their future path in life. After alluding to the many anxieties, responsibilities, and uncertainties, connected with private practice, he turned to the brighter side, and explained the many circumstances which made it one of the most interesting and intellectual, as well as the most noble and useful, of professions.

In respect of the public services, Dr. Clapton made particular reference to the present deplorable state of the Army Medical Department. He said: It is most unfortunate, to say the least, that the terms of service are so unsatisfactory, that good men will not accept them; and the authorities are at their wits' end to devise some means by which they may secure indifferent men. There must be something radically

wrong, when the army, in time of peace, urgently needs medical officers, and cannot obtain them. There are plenty of medical men, and good men too, who would be willing and glad to enter the service, if only the terms of inducement were such as gentlemen could accede to. I have taken some pains to learn, by personal inquiries amongst present and past army surgeons, as to what the grievances really are. It seems to me, that the fundamental evil is that the Medical Department is, as it were, between two enemies. Each is willing to grant what the other refuses to give. The Horse Guards have no objection to the department being better paid; but is most jealous of granting any increased rank. The Treasury would be willing to see every doctor with the rank of general, provided he got no increase of pay; and so the poor doctor falls to the ground. The Horse Guards especially have shamefully treated the department, and will no doubt continue to do so, if by such means as they are now attempting, they can induce any sort of candidates to fill the large number of vacant appointments. If they attract only second-rate men, let them, at all events, not complain if these do not turn out first-rate. They offer no inducements or advantages to the good and able ones; and now, failing such, they are trying to secure the idle and unsuccessful;—men who are what is called in the army “her Majesty's hard bargains”, who draw the same pay as the really good men, enjoy the same privileges, and from their known incapacity are never given any harassing work, and in consequence get more leave. Among the older surgeons in the army, a great grievance is that they can never feel settled anywhere, and are never consulted as to where they would like to be ordered. As a recent instance, an Inspector-General of Hospitals, a very able man, with a large family, had scarcely been settled at Aldershot six months, when he was ordered off suddenly to Malta. He could not afford to be on half-pay; and, though feeling acutely his hard lot, after nearly forty years' service, he went, and almost immediately died of fever. His widow is now grateful for the gift of £5 from a charitable society. It is certainly a great drawback to the Medical Department, that there is so little occupation found for surgeons wishing to retire from foreign service, but very willing to do any fixed work at home. The other departments of the army have an immense number of appointments to retire to; such as those of militia adjutants, recruiting officers, volunteer instructors, governors of prisons, superintendents of police, and so on; but there are no similar appointments for surgeons; so that many of the older men, who would retire if they had anything to fall back upon, stay on, and so stop the promotion of their juniors. It would really be good economy for Government to make a number of civil appointments for half-pay medical officers; such as those of inspectors of prisons, of vaccination, and the like, who should be bound to go abroad, if needed, in the time of war, but should not be liable to be moved for any other cause. Then, again, a glaring grievance in the Army Medical Department is, the almost total denial of leave of absence. The medical officers should get at least one month in the year; other officers get nearly three. A former student of this hospital, a most able and accomplished man, Mr. Edward Wrench, who served with great distinction throughout the Crimean War and the Indian Mutiny, informs me that, during the eight years he was in the army, he only got two months leave of absence, except when he actually paid a civil surgeon to do his work. All these just causes of complaint are bad enough, but worse remains behind. It is that of a positive breach of faith on the part of the authorities in reference to the Warrant of 1858, upon the points of seniority,

precedence, choice of quarters, presidency of boards of inquiry, allowances in the way of forage, etc. The fact is that, when the warrant was issued, all these concessions were very enticing, and worked very nicely on paper; but when they came into operation they were found not to work evenly, and, in short, were virtually cancelled by what amounted to nothing more nor less than breach of faith on the part of the Horse Guards. And now look at the recent device of making acting assistant-surgeons—now, in profound peace! The authorities choke off promising men from the service by their previous want of faith, and then, to improve matters, have recourse to this expedient, at the expense of all (especially the junior officers) already in the service, condemning them, of course, to foreign service. In the present attitude of the rising generation of medical men, it is impossible but that these things must be set right before long, and the just expectations of the medical profession satisfied; for, if not, it will assuredly be found that no well educated gentlemen will be induced to enter the army. It cannot be right that they should have to submit to all its dangers and discipline, with but very few of its honours, and with so many just grievances. Happily, not even the worst enemy of the medical profession can say that its members are not patriotic, as well as brave and enduring. As a class, I will venture to say, none are more so. If one seeks a monument of those who fell in the Russian war, he will find it in that Gothic Cross now being erected at Netley, and recently inaugurated by the Prince of Wales. There he will view a tablet dedicated to the memory of no less than fifty-four medical officers who, in their noble mission, heroically sacrificed their lives. Amongst them are two past house-surgeons of this hospital; and they also include such men as Thompson, who, after the battle of the Alma, worn out by fatigue, paid with his life the penalty of heroic devotion to the performance of his duty; and O'Leary, who, before Sebastopol, was cut in two by a cannon-ball. It would be as well here to warn the authorities that they must not reckon too much, as they profess to do, on the medical profession being overstocked; and that, if a war were unhappily to break out, they will again be able to secure the services of two or three hundred volunteer surgeons; for it must be borne in mind that, whereas the number of medical men under forty was 11,105 in 1851, in 1861 there were only 9,910; and this notwithstanding the great general increase of population.

Referring again to the proof of the manner in which a medical man will conduct himself in the midst of danger and slaughter, perhaps no better instance can be found than the recent one of poor young Llewellyn of the *Alabama*, who, rather than leave to their fate the wounded and shattered men under his charge, and escape, as he might have done, chose to tend them to the last, and to sink with them. Again, only last year, one of our own students, Mr. Chaffers, actuated by laudable motives, proceeded to the Southern States of America; and this is what we read of him in a recent impression of the *Memphis Daily Appeal*: "We have heard frequent mention of this young surgeon, who will carry back to England a scar in the face made by a Federal sabre at Shelbyville; and many are the gratefully eloquent eulogiums upon his skill from those whom the fortunes of war submitted to his knife. He is now acting chief surgeon of Hume's Cavalry Division. Since his assignment to duty, he has devoted himself to its discharge with an assiduity and untiring faithfulness which reflect the highest credit on him as a man, and with a skill which does honour to the ancient foundation which gave him his degree." The last instances

which I shall mention are to be found in last week's *Gazette*. Her Majesty has been graciously pleased to confer the Victoria Cross, in recognition of acts of distinguished bravery in the field, upon two medical officers—Assistant-Serjeant Temple, and Assistant-Surgeon Manley—the latter, I am proud to say, a St. Thomas's student of my own year, and well known to many now present.

The subject of the future site of St. Thomas's Hospital was then commented upon; and a warm eulogium was passed on Mr. Baggallay, the ex-treasurer, followed by congratulations to his successor, Mr. Hicks, and cordial wishes that he might long live to watch over and advance the future destiny of the institution. Alluding to the removal of the hospital, Dr. Clapton said that it had been but a question of time. Many obvious circumstances, besides railway encroachments, had long pointed to this necessity. Even as long ago as 1832, the question of the removal was under consideration. The physicians and surgeons at that time addressed a circular letter to the governors, and earnestly requested their attention as to whether the hospital might not be rendered more extensively and efficiently useful by its removal to a more eligible situation than that which it then occupied; and ever since the same thing had been agitated in some way or other.

In conclusion, he begged the students to strive to emulate the earnest zeal, the high attainments, the noble qualities, of the many great and good men whose names and fame are associated with their *Alma Mater*.

#### WESTMINSTER HOSPITAL.

THE Introductory Lecture was delivered by Dr. BASHAM. Referring to the circumstance that it was twelve years since he gave the introductory address of 1852, he remarked that such an interval, insignificant as it was in the history and progress of science, was, in the life of an individual, an integral part of his career, filled, possibly, with momentous consequences to his social or domestic happiness, or perhaps charged with the elements of his professional success or failure. Nevertheless, infinitesimal as such an interval might be in the history of science, the circumstances or discoveries of the time might mark it as an epoch of distinction and celebrity. The student of history could recall such periods, when, either from the splendour or magnitude of the discoveries made, or by the successful application of principles to the requirements of every day life, a characteristic stamp was left on that page, and it remained pre-eminent in the influence it exercised over succeeding generations. He thought it would be an interesting task to glance over the interval between 1852 and 1864, to determine by what scientific feature it had been distinguished. Such a retrospect would afford abundant evidence of the untiring, ever-productive energy of the human mind, and the rapid development of agencies and means tending to the increase of human comfort, health, and enjoyment. After describing some of the more prominent discoveries in physical and chemical science, particularly the method of the spectrum analysis and the valuable results already obtained by it, furnishing, as it has done, an explanation of the efficacy of the Bath waters in gout, by demonstrating the presence of lithium in those waters—a metal they were hitherto not known to possess—and mentioning one or two interesting facts in physical science brought to light in this interval, Dr. Basham remarked, that it became very evident that in every department of science, in every branch of engineering and mechanical skill, the same activity,



the same progress, the same untiring, inexhaustible energy, were displayed. The full exposition of such a subject was far beyond the limits of a lecture; but he alluded to them for the sake of comparison—for the sake of asking whether, in this short interval, the medical mind had been equally progressive; whether the same activity of thought, the same independent methods of inquiry, had prevailed in our pursuits, which had so eminently distinguished all the collateral sciences. He would endeavour to determine whether there had been a similar activity—whether, even in a subordinate degree, medical and surgical science had contributed, not to the wealth, but to the amelioration of disease, and consequently to the comfort, health, and duration of human life.

He thought that those comprehensive schemes applied to the sanitary condition of towns, and particularly of this metropolis, had their origin in medical suggestions. But he would turn from this Branch of the subject, to attempt an estimate of the state of professional opinion on several fundamental points, which might afford a key to the state of medical progress at the present time.

The gradual decay of old theories, the development of doctrines in relation to the pathology of inflammation and disease in general, might be traced to a firmer reliance on fact and observation, originating, doubtlessly, in the marked change from dogmatic to practical teaching which had for some years characterised our schools. At the period when he last stood there, opinion in reference to the theory of inflammation was already beginning to change; and the marked alteration in the principles of treatment, which was now so general, was then only beginning to be manifest. To what influence could this salutary change be traced? It arose from the development, it might almost be said simultaneously, in many minds, of the fruits of more extensive observation. Minute researches, with improved instruments, had led to a more correct knowledge of the structural elements and functions of the tissues. It was, therefore, to a more enlightened physiology—to a clearer appreciation of the circumstances which regulate development, nutrition, and secretion—that the great changes in certain fundamental pathological doctrines might be traced. Paying a just tribute to the labours and opinions of the great John Hunter, admitting that his facts were indisputable, for he was a faithful recorder of what he saw, we had, nevertheless, been compelled to differ from the conclusions he had formed regarding the nature or essence of inflammatory action. The Hunterian doctrine was, that inflammation represented an increased activity of the power which a part naturally possessed. This idea of an increased activity of the vital energies of an inflamed part was derived from what was supposed to be the increased activity of the capillaries, as seen in the augmented redness and heat. It was on this point that the modern pathologist joined issue with the followers of the great master of English surgery. Improved instruments of observation, and their application to the state of the minute vessels in inflammation, had led to the conviction that the redness, congestion, hyperæmia, by whatever term expressed, was brought about by a want of power—a paralysis in the minute vessels; that the accumulation of blood was due to a passive dilatation, a diminished power to transmit the blood forward; and stagnation of the current followed. The phenomena of inflammation, wherever located, represented defective nutritive conditions; the relation of supply and waste was lost, or, at any rate, disturbed. Inflammation, therefore, as we now view it, was a process of exhaustion; for, if it were as the Hunterian school considered it, evidence of the increased ac-

tivity of the power which a part naturally possessed, then nutrition, nerve-supply, vigour of circulation, activity of secretion, exaltation of function, should severally be augmented. But, on the contrary, they were observed, either separately or collectively, to be depressed, defective, or deranged. Reference was then made to the researches of Professor Virchow, and the influence which the cellular pathology was exercising over the pathology of our time. The principles of treatment, the therapeutics of the day, had necessarily followed the more rational views of the nature of diseased action; and the great revolution which the last few years had witnessed in the management and treatment of inflammatory disorders and fevers was traced to a similar cause. Improved methods of research, pursued independent of previously formed opinion, a firm reliance on fact and observation, had led to this wholesome revolution of opinion; and he was, therefore, led to the conviction that a similar activity of thought, the same restless spirit of inquiry, the same devotion to patient observation, which had so eminently distinguished the collateral sciences, was also found active, energetic, and productive, in medicine and surgery. To prove this proposition more clearly, it would be necessary to call in evidence the works and labours of those who during the last ten or twelve years had won some victory over error, or had contributed to the progress of medical and surgical science. There was not a hospital or medical school in this metropolis, from among the physicians, surgeons, and lecturers of which one or more could not be selected who had contributed to the progress of medical and surgical science. The limits of an introductory lecture would not permit him to enumerate their labours. At the same time, he was not unmindful of the labours of others unconnected with medical teaching, who had also successfully cultivated observation, and lent their aid to the general progress.

There were two works—the one surgical, the other medical—which he thought might be selected as criteria of the tendency to original observation, and an entire freedom from all speculation or theory—redolent with fact, and instructive, fair examples of the present aspect of medical and surgical science. The first was Mr. Hilton's *Influence of Mechanical and Physiological Rest in the Treatment of some Surgical Diseases*. It was a work full of interest and instruction; and the deductions on the therapeutical influence of rest, drawn as they were from fact and example, entirely free from theory or dogma, entitled the author to the most honourable place among the surgeons of our time. Dr. Anstie's work on *Stimulus and Stimulants* was equally characteristic of that originality of observation which was rapidly gaining victory over error, supplanting the vague and unsatisfactory doctrines of the past, and promising a more rational explanation of the *modus operandi* of medicinal and other agencies.

The limits of a lecture would scarcely permit him to do more than name the most distinguished authors of the last ten years who had ministered to the advancement of medical science. The influence of the labours of many of them would be felt and appreciated in the improved treatment of both medical and surgical diseases; and to them might be traced our more rational and less theoretical conception of the nature and consequences of disease.

In conclusion, he desired to address a few words more particularly to those gentlemen who were studying, or were about to commence their studies, at this hospital. He had particularly dwelt that evening on the marked change which the last twelve years had effected in theoretical medicine. He had mentioned the agencies by which that had been accom-

plished, and he had cited the writings and labours of those who had most ministered to its progress. They, like the young gentlemen before him, were once students. They had used their time usefully and practically: they observed, they thought, they inquired for themselves. The youngest there might do the same; and they, in their generation, by cultivating similar habits, might become instrumental in still further securing and strengthening the foundations of medicine and surgery in fact and observation.

Dr. Basham, in conclusion, observed upon the importance and influence of the preliminary education of the student. The elements of a good classical education were paramount and indispensable; but he considered an elementary knowledge of physical science equally so. The great Bacon had, with his characteristic force, said that, if medicine be destitute and forsaken of natural philosophy, it is not much better than an empirical practice. Some knowledge, therefore, of the powers and properties of matter, such as was obtained by an elementary knowledge of hydrostatics, pneumatics, mechanical force, electricity and galvanism, theory of heat, was most essential. Thus prepared, the student commenced his studies of anatomy and physiology with the greatest advantage; and his progress would be proportioned to the amount of this necessary groundwork. Glancing hastily through the branches of special study which he would be required to follow, he was urged to habits of industry and observation—habits which, once formed, would never forsake him, and be most valuable to him when the time arrived for the exercise of his professional acquirements; and though, from the demands on his time, he might never be able to give publicity to the results of his experience, he would be scarcely less instrumental than those who had been named to-night, who had contributed to the advancement of medical science, and thus fulfilled their useful mission—the mitigation and relief of the diseases and sufferings of the generation in which they lived.

At the conclusion of the lecture, the visitors and students assembled in the board-room, where many articles of scientific interest were exhibited. Refreshments were served in the corridor.

## MANCHESTER ROYAL SCHOOL OF MEDICINE.

THE Introductory Address was delivered by Mr. STONE. He said that the life of a medical man was an arduous one. It was the depository of large trusts, and peculiar responsibilities hedged round the whole course of his career. The student did wisely who surveyed the sphere of his future labours in the sunlight which its worthies had shed around it. Certainly, no walk of life had been more abundant in disinterested labours. Its benevolence to the poor was witnessed in private practice, no less than through the hospital. It shrank from no danger; but carried its life in his hand as it combated with contagious diseases. It mingled with the ruck after battle, but not to leave the wounded and dying. Before the dust of the fatal mine which was lately sprung at Petersburg fell again to the ruptured earth, the army-surgeons began their labours; and while the Netley monument is rising to the honour of the surgeons who fell in the war of the Crimea, the students of Charing Cross Hospital are committing to a granite tablet the name of the brave Llewellyn of Alabama story. Benevolence, heroism, duty, formed the tricolour of the medical profession; and through

every year noble deeds succeeded to noble inspirations.

"And so it runs, in our fair island story,  
The path of duty is the path of glory."

Mr. Stone then commented on the study of anatomy, as the sure foundation of medical learning; and on the value of physiology, as the vestibule to the temple of medicine. Men out of the pale of the profession were drawn to physiology; and able writings attested that the secular intellect could find fascination in the subject, and, from a lay standpoint, could offer solutions which were admitted to have their weight in helping to the elucidation of the laws concerned in vital phenomena. The mine was worked from many shafts.

Mr. Stone then dwelt on the influence the microscope had had, and to the other facilities for study. Graham, the Master of the Mint, had put in circulation a mode of investigation and analysis which had the genuine ring of a prime discovery. Dialysis was of infinite assistance in commercial analysis; and no less than in solving questions connected with complex organised compounds. The per centage composition of animal or vegetable structures shed but little light on the mysterious interchanges which life in the plant and animal carries profoundly on; and to this revelation, Graham's most recent experiments pointed the way.

Mr. Stone then urged on the students the value of chemistry in its relations to medicine, pointing out how chemistry and medicine were intimately woven, and what valuable results had sprung from the labours of their illustrious townsman, John Dalton, who, sixty years ago, lifted up chemistry to the dignity of a true science.

The literature of modern medicine could not be understood unless the reader knew chemistry. "It walks your hospital, and modestly contributes to your clinical facts. In the operating theatre, it hands you the phial of chloroform; and while, for the patient, it assuages the terrors of the knife, it permits surgery to draw very near the citadel of life. In her gifts are healing medicines; and there is a belief amongst chemists that, as she has eliminated new dyes of magic beauty from coal products, so will she, in the plenitude of her power, evolve more active forms of drugs than the world has yet seen."

Mr. Stone briefly hinted at the remarkable labours of Dr. Frankland; and then commented on the new *Pharmacopœia*, hoping that in the next edition the centigrade system of valuing drugs might be more boldly put forth than in the appendix.

After a passing notice of botany and other subjects of study, Mr. Stone advised the students to cultivate the amenities of life, and thus prepare for their exercise when in practice. The element of character was no less essential than acuteness and perception; and there was a moral as well as mental advancement to be sought after. Books and reading were next commented on; and the student was warned to resist the temptation to lessen his devotion to the pen in note-taking.

Mr. Stone then explained that their prizes and certificates of honour were for general proficiency in medical learning as a whole, and not rewards for merit in any one department, which a student might display merely because he had a taste and special fitness. The lecturer feared that elsewhere there was a disposition to call out an intellectual or theoretical study in students, rather than to lead them to prepare for the positive duties of medical practice. The examinations of the public boards were, to his view, drifting from the practical to the theoretical; and, perhaps, the London University exemplified this more than the Hall or College. If this were pushed



too far, a student would be led to consider the examinations the "be all and end all" of his pupilage; and the obtaining of a "diploma" would become a second edition of the "preliminary examination", when books and severe cram would win the day.

Mr. Stone then proceeded to comment on the fashionable deliriums of the day, and the empiricism which blackened the weekly paper of little towns with unblushing effrontery, and under more select phrases got admission into other papers and journals. Faraday had rebuked the age for its belief in spirit-rapping; and exposure and ridicule had been tried on the race of quacks; but the mountebank was still in the ascendant.

Mr. Stone urged that physiology should be taught educationally to the masses of the people. Might it not be that professional reticence had ignored the rights of the public to be instructed in the laws of health? There was a strong desire to know the why and wherefore when disease shut a man in his chamber; and troublesome questions were sure to be put by an irritable patient who had had no previous education to admonish him "to suffer and be still." Mr. Stone was of opinion that many patients grew disloyal to legitimate medicine, from sheer ignorance of the simplest facts in the laws of life and disease; and when advertised specifics came before them, promising a speedy cure, how many left the lines, and reported themselves to the chiefs of the rebel army of quacks. "Poverty of ideas on the laws of health" (continued Mr. Stone) "leads to a misguided trust in advertised specifics; and I hold the belief that, if medical men would bring the lamp of knowledge into the outer darkness, the evil spirits which torment the life of credulity would pass away."

Mr. Stone then reminded his audience of the sacred relations which a conscientious medical man had in the house of mourning; and the needful preparation to meet those exigencies where the man more than the physician is wanted to soothe the dying and comfort the bereaved.

Mr. Stone wound up his address with pointing out the long standing of this provincial school; and a hearty wish that its founder (Mr. Turner) might live to see the coming jubilee of their institution.

### ST. BARTHOLOMEW'S HOSPITAL.

AFTER some introductory remarks, Mr. CALLENDAR stated that his object was to place before the students their work side by side with suggestions for its pursuit, and with sureties for their ultimate success. Especially he desired to tell them of certain aids to study, which they must practice, each one for himself, because they were self-aids. As all our knowledge and all our progress had been gained direct from Nature herself, and as she revealed her secrets only in return for real hard work, so their success with her would be much less if they were not trained in youth to their task. This mind training was considered of such first-rate importance, that every encouragement had been given them to make its cultivation an attractive task. Their real work now commenced in earnest; they now entered upon the studies which revealed to them medicine as a grand and noble science. They might not indeed all excel, but they would all learn a great deal; and he could promise them that, if they worked now with industry and with determination, they would not fail to attain to that which all naturally covet, modest it may be, but substantial and honest success.

After a reference to the importance of scientific studies, those sciences with which the profession of medicine were more immediately concerned, and after

referring to the importance of the study of anatomy, physiology, and of pathological anatomy, Mr. Callendar told the students that, after all, their chief difficulty lay in learning how to treat disease. Here they must bring to bear what was known as practical knowledge, the wisdom which experience gave, that experience of which Carlyle wrote, "She doth take dreadful high wages, but she teacheth like none other." Nor was it difficult to explain to them what was meant by this practical knowledge. A physician, for example, might know all about his subject, man—his diseases, their causes, their effects, and their recognised treatment, but above all this was the facile and dexterous handling of his knowledge and of his remedies, so as to fence and parry, and, if possible, get the better of disease; and, be it how it may, this was a possession few had excellently well, and which, despite all its training, the scientific mind sometimes failed to grasp. At the same time, the value of scientific knowledge was great. They lived, it was said, in a practical age. By all means let them be practical, but let them none the less possess the scientific knowledge which fitted them to be so. Practice alone could give them experience in treatment. Books could not do more than teach general principles; for man's body was so moulded and conformed to the mind which controlled it, that influences of education, habits, associations (the accompaniments of health), gave rise to endless variations in the progress of, and, consequently, in the management of disease, which no book yet written could even pretend to indicate. They should learn to recognise means of cure other than those tabulated in the *Pharmacopœia*. Fresh air, diet, cleanliness, mind-occupations, and the like—these were the remedies with which to assist nature in throwing off disease; they should never forget that nature effected, if possible, the cure; and that the physician was best skilled who, by judicious selections from his *materia medica*, so lightened her task as to relieve the passing pain, who supported, and, if needs be, stimulated her efforts, or who transferred the stress of a disease to where it could be better borne by the system.

He advised the students to strengthen themselves for work with materials which were always ready to their hands. They should practise control and discipline. The self-discipline of the mind was a voluntary restraint—the discipline which resulted from willing nothing until it had been well thought over, and the order which must ensue as the outward sign of such methodical, business-like self-control. The intellect, too, must be tutored in obedience to moral control; for, although man might reason well and possess the will to carry his purposes into practice, yet he would systematically err if there was not over all this higher influence, the absence of which the world was a sharp censor to detect. Subject to moral control, to be well drilled in self-discipline, they must habitually reflect and think over all matters which engaged their attention, and thus utilise another of their possessions—the power of concentrating thought. Nothing was more difficult to strengthen than was this faculty, none more to be regretted in its weakness. In the pursuit of discipline they acquired thoughtful habits, and by thus reflecting and meditating they ripened another of their possessions—memory, which required this exercise to enable them to put forth its fulness of power. We were much in the habit of speaking of memory as a gift specially to some, but in truth it belonged to all, and only needed calling upon to respond. Memory, however, was often found to be more subtle for one thing than for another. This was the case in most instances of remarkable calculators, in whose reckonings memory played so important a part; as it was too with Charmidas the Greek, of

whom Pliny wrote that he could repeat from memory the contents of the largest library; so, too, with great linguists, as the Cardinal Mezzofanti. They might be quite sure he was a bad workman who complained of his memory, and that by work and by degrees they would certainly remember better and better, and as their knowledge lived in their memory, so it would be ready for use and for application on every apposite occasion. The impressions would be most sharply and durably cut in the mind which made their marks through congenial tastes; and knowing this, he would not press routine too closely, but, whilst endeavouring to interest them in their studies, and to make their minds work with intensified vigour, he would leave them to apply themselves to the acquisition of knowledge through those channels in which they were best aided by their memory.

To practise control and discipline, to exercise thought and memory, required patience and perseverance. As perseverance, however, was a term of general significance, honest industry should rather be their watchword. They should set down in the very beginning their resolve to be faithful to it; for without it there was no hope of success or of future distinction. Originality, new thoughts, came only through patient work. Although it was a twice-told tale, he could not refrain from warning them against relying upon fortune. No such thing as luck or chance, as they should understand the term, virtually existed. It was confused with the clear sight which seized the right moment for action. The battle of Marengo was won by a charge of the French cuirassiers, and the world said, "by what a lucky chance"; but General Kellerman described his exploit, "I see it—I am in the midst of them!" To avail themselves of so-called fortune, they must be well trained through habits of industry and observation to be ready to make good use of opportunities.

Much as they might learn, their work knew neither halt nor stop; they must continue at all times and in all seasons in attentive observation upon nature, striving to get as near truth, or truth's likeness, as they could; they must bear in mind that, after all, the acquisition of knowledge was not the only or indeed the chief aim of their intellect, for knowledge and wisdom, far from being one, have oftentimes no connection. And wisdom was not to be mastered by work alone, like knowledge; it came only, assisted, it was true, by knowledge, as the growth of time. Wisdom was the sum total which resulted from the moral control, the self-discipline, and the industry of which they had been told. Yet he scarce expressed himself aright in naming wisdom to them as a sum total, for whatever share of wisdom they might possess, they must still pursue, restless for more. He considered that their work must increase with the advance of knowledge generally, and that more would be required of them if they were to maintain their position in advance. Let them remember, however, that perseverance was irresistible; before it their difficulties would imperceptibly disappear, and their work was sure to be crowned with the desired success, if only they would act up to the advice given by the Wisest of the wise—"Whatever thy hand findeth to do, do it with thy might."

Had they seriously thought about the work which, as physicians and surgeons, they would hereafter be responsible for? Was it to heal the sick? Was it to stand, not unfrequently—he said it with all humility—between life and death? It was more even than this. It was to do this better, more wisely, more surely than heretofore. This had been our work in the times gone by—we toiled for it now; and for this it was that men would look to them in the times to come.

## THE LONDON HOSPITAL.

DR. LANGDON DOWN, Assistant-Physician to the hospital, delivered the Introductory Address. He remarked that they were that day inaugurating the Seventieth Session of the London Hospital College, and dwelt on the advantages which resulted from the connection of the hospital with a medical school.

Dr. Down referred briefly to the medical politics of the last ten years. He felt that the Medical Act, if carried out in good faith, would tend to raise the *status* of the profession; but lamented the conduct of some of the corporations, who were doing all they could to perpetuate mediocrity. He congratulated the profession that the Royal College of Physicians had undertaken the examination of the general practitioner; and that the University of London had added Master in Surgery to the list of her brilliant degrees.

Dr. Down then referred to the discussions which had taken place of late years with reference to the Naval Medical Service, the Medical Treatment of the Poor, and the Army Medical Department. He thanked the London daily press for the able manner in which they had enlightened the public on the suicidal policy which is being practised, in reference to the medical service of the army, whether in India or that of Her Majesty. He felt sure that, under the present arrangements, the accomplished medical student would dismiss from his consideration a department in which the glory of killing eclipses entirely the honour of healing; that the best men would seek for success in civil life, rather than tolerate official insincerity or compromise their self-respect.

Dr. Down then dwelt on the enlargement of the hospital, which was then progressing, and of the advantages which would follow to the medical school. The unparalleled subscriptions which had poured in were accounted for by the peculiar claims of the locality, the deserved repute of his colleagues, the popularity of the hospital, and the perfection of its civil management.

He then addressed himself to those who were returning to their studies, and encouraged them to come with earnest hearts to the renewal of the struggle. If in past times they had allowed precious opportunities to pass unregarded, let the future be the compensation of the past. If zealous had hitherto been their work, and increased tension not possible, their season of rest had been a joyous one, because it had been nobly earned. They had realised the vantage ground of effort; let not their past success be marred.

He then directed his observations to those who were commencing their academical course that day. In their choice of a profession, had they thoroughly considered the requirements it demands, and the sacrifice it claims? Had they, by a process of introspection, well satisfied themselves that they came with holy purpose and high resolve to be true to themselves and to their race in the exercise of a vocation, to which, if they did not bring a loving heart and a vigorous mind, it were better that they came not at all? They were embracing a profession which does not hold out the prospect of unlimited wealth, or of political renown. The coronet was not a prize, nor the marshal's baton a possibility for them; the mitre was not the termination of their career. Yet he congratulated them on their decision. They might readily insure a competency without the risks of mercantile life. Their capital would be knowledge, which no bankruptcy could take away. Their arena would be the chamber of sickness; and their eloquence would be called upon to stay the torrent of human sorrow and mingle in the cadences of human joy.



Their clients would rarely present a case in which their honour would be sacrificed in advancing to the rescue. Their battle-fields would be mighty and varied ones. They would need all the sagacity which intrepid exploits require—all the fortitude which daring deeds demand. They would have to stand in the breach unruffled when all around was turmoil, to keep serene their judgment amid scenes of agonising pain and the wanderings of alienated mind. They were embracing a faith which was catholic—a creed which was wide as humanity. They would not be bound down to musty formularies or worn-out dogmas. Progress and truth seeking would be the articles of their belief and the stimuli of their lives. Their homilies would have to be addressed to the consciences and hearts of men of every variety of creed, and perhaps with no creed at all. Their work would be in the spirit of Him who went about doing good, and of His Heavenly Father who “sendeth rain upon the just as well as upon the unjust.” The opportunity would oftentimes present itself of pointing a moral, and enforcing a religious truth; of shewing the rightness of virtue and the folly of vice; of teaching in a spirit not self-righteous, the “beauty of holiness” and the deformity of sin. Their counsel would be sought in the intricate difficulties of private life. Revelations would be made to them of the frailties as well as of the nobleness of humanity. They would oftentimes become the depository of secrets sacred as the whisperings of the confessional. It would be theirs to minister to a mind diseased, and dispel the mists from that bright mirror which ought to reflect the image of divinity. Such being their mission, what during their student period had they to do? How were they to do it?

Dr. Down insisted on the value of preliminary training, and expressed himself as of opinion that no youth destined for the medical profession should leave scholastic work until he had matriculated at the University of London. He dwelt on the importance of giving much time to anatomy and chemistry, and traced the mode in which these subjects ramified in the other departments of medical knowledge. Physiology was of essential importance to the right appreciation of disease. Histology, vegetable physiology, and comparative anatomy, had each important claims on their regard. The study of systematic botany and systematic zoology cultivated the faculty of observation which was so essential to a practitioner in their art. Materia medica and therapeutics should secure some share of their attention. The more thoroughly they made themselves acquainted with the subjects he had enumerated, the more successful would be their efforts in the attainment of what should be their great end—to become successful and cultivated practitioners in medicine and surgery. To be practical, should be the culminating point of their desire; but they should view with suspicion those who are ever throwing doubts on the man of culture, and who were pluming themselves as being practical men. They would find that, they were for the most part those who would soon dwindle down to the merest routiniers, ignoble workers in a noble calling. He urged them, on the basis he had indicated, to raise a fitting superstructure. The hospital they had selected presented a field for surgery which was perfectly unrivalled. The wards and waiting halls would afford them the means of becoming accomplished as physicians. Forensic medicine, and the diseases of women and children should share much of their attention. He combated the tendency in the present day to disregard oral teaching; and gave as the result of his observation, that the gentlemen who despised lectures were usually those who would never reflect credit on the school or profession to which they belonged. His advice was to read vigorously; but also to attend the

dissecting-room, the demonstrations and lecture-room no less assiduously. Where the professors examine as well as lecture, the student should never lose the opportunity of being questioned. On the commencement of their studies, it was very important that they should have a well defined aim, and they should take care that they aimed high enough. There were numerous examining bodies, full too numerous in the lecturer's opinion; many of them, to their disgrace, had been trying to solve the problem: with how little of this world's knowledge a medical man might set up. Dr. Down advised the students to aim for the degrees of the University of London. They had the undisputed reputation of occupying the highest position in the United Kingdom. If they obtained them, they would have titles that would never cause them to shudder lest their source should be discovered; they were degrees which, on account of their veritable character, commended themselves to the public and the profession in a way which makes them most desirable objects of their ambition. Succeeding in these, any other qualification they might deem it desirable to obtain would be taken by them as mere by-play. Dr. Down emphatically insisted that however important were reading and lectures, they must be subsidiary to their work in hospital. The out-patients department would offer vast fields for diagnostic culture. The receiving room would supply abundant opportunity for acquiring manipulative skill and ready tact in grave emergencies, while the wards would demand a devotedness which would secure a rich return, and for which nothing could be substituted. But in their acquisition of knowledge, they should ever cultivate a regard for the feelings of the patients. Their walkings would be amongst the sickened and the sad. They would have to deal with sensitive spirits as well as injured bodies. Their education as medical men was to be valued inasmuch as it cultivated not one aspect only, but the entire man. It would, therefore, be sadly incomplete, if while storing their minds with knowledge, it failed in educing sympathy with suffering and tenderness to the troubled.

Dr. Down could not inform them of any royal road to medical knowledge. He knew only the steep but well trodden one of earnest and persistent work. Their mountain journey would be aided by guides at every pass, guides who had made successful ascents themselves, and who had not lost sympathy with new adventures, whose aims were high, but whose courage faltered. Their guides were conscious of dangers of which they would in all earnestness warn them; they recollect some whose ascent was not a success, others whose attempts ended in disappointment.

The lecturer thus concluded. “The guides remembered, however, other than doleful tales and miserable failures. They preserved fresh in their memories the names of some of the companions of their own first ascent; others who, before and since, had scaled the difficulties, and who were now far away from leading strings, making explorations where no human foot had been; who were ascending higher and yet higher with no assistance of chart, for their labour was in order to provide one; who are daily collecting facts and recording observations; who are permeating mankind with their thoughts; who are carving their names in enduring characters, and are spending, and being spent, for the glory of God and the good of man.

“Let these animate you. Let the student's life, which you commence to-day, be a fitting prelude to your work beyond the stage of pupillage and to the higher life hereafter. Let it be characterised by all that is earnest, true, and noble. Let it be honest, despising all seeming in lieu of reality. Let it be gentle, blossoming with kindly acts and genial sympathies. Let it be generous, crediting to the full

the goodness of your fellows, and hesitating to sully their fair fame. Let it be brave, meeting trials with fortitude, and sharing the burthens of others. Let it be wise, redeeming the time, and adding knowledge with increase of days.

"I have already furnished you with the formula to aid you in the solution of your problem, the secret that will command success, the talismanic charm which turns everything into gold, the potent spell at which all difficulties vanish. It is earnest and persistent work.

"Let it be supplemented by a gentle, Christian life, terminated by a peaceful, hopeful death."

### ST. MARY'S HOSPITAL.

THE Introductory Address was delivered by Mr. TOYNBEE, F.R.S. The lecturer began by referring to the many subjects of interest which suggest themselves to the mind of the medical man as he reviews his professional experience, and which might serve as the theme of such a discourse as the present; but, he said, he passed them all by for one which to men engaged in the practical medical life must be of greater interest than any—the Philosophy, or, as he preferred to call it, the Significance of Disease. By this term he meant the end or object which diseases served in reference to the animal economy; and he should endeavour to maintain the position, that disease was in all cases not a destructive, but essentially a reparative process, illustrating his argument by cases drawn exclusively from his own—the aural—department of surgery. He combated the current views on this subject, which regarded disease as a process the tendency of which is to injure the frame; and, referring to the words of Hunter, set out the propositions, that every disease is preceded by some injury; that the disease is essentially a process tending to repair that injury; and that its object is to reinstate the normal condition. Even in cases in which its result is fatal, the tendency of the disease is to repair injury; though, owing to the circumstances present, it may take a form or affect an organ that renders it destructive to life. For the injury may be either local or general; and a local injury may bring about an attempt to remedy a general one, in a way that fatally involves a vital organ. Thus an injury to the meatus of the ear in a healthy man induces a disease—inflammation and suppuration—which repair the damage; but even a less injury to the same part in a person labouring under the poison of gout—a general injury—may bring on a more intense and wide-spread inflammation, which involves the brain, and issues in death. But this more extensive inflammation is equally an attempt to repair an injury—the general injury of gout. If the inflammation occur in a less vital organ, say the ball of the great toe, its character as relieving the system, as repairing its general injury, is recognised. Many more examples were given, with illustrations of the principles and mode of practice which this view of the nature and meaning of disease enjoined; and the lecturer concluded in the following words.

"I cannot but think that, if the view of the philosophy of disease indicated, barely indicated, to-day has a foundation in truth, it may, in some respects at least, be more acceptable to the human mind than is the view commonly entertained. To my own mind, at least, the thought is not acceptable, that God, having given to man life with its marvellous attributes, sends disease for the purpose of taking that life away. No! I cling rather to the belief that man, placed on this wonderful globe to battle with and live by its elements, finds it his destiny, as he struggles

upwards in ignorance and in weakness, to encounter difficulty upon difficulty, to suffer injury after injury; that, although to endure injuries is thus the inevitable lot of man, still in disease is found at once a warning of the presence of an injury, and at least an effort towards a remedy. And because man, in the great battle of life, is oftentimes so deeply injured as to be beyond the possibility of a cure by either Nature or by Art, still let him not repine; for even sickness has its blessings and its hopes, and through its trials and its sorrows is held the sacred boon of life. So, too, when our spirits are cast down by a view of the sad amount of misery inseparable from disease, let us take heart from the conviction that even our limited ken must recognise beneficence in it; and, further, let us trust confidently that, as each succeeding generation of mankind learns better how to live, how to gain the good of life without encountering its injuries, so will disease become less necessary, and will diminish in the land."

## British Medical Journal.

SATURDAY, OCTOBER 8TH, 1864.

### THE DEGENERATION AND REGENERATION OF NERVES.

M. VULPIAN has lately discoursed on this very interesting subject in his lectures at the Museum of Natural History in Paris. The physiological property of motor and sensitive nervous fibres is the property of undergoing certain modifications under the influence of some agent. This property belongs to the nerve-fibre, independent of the nervous centres. "I am thoroughly convinced," says M. Vulpian, "that the origin of this property of the nerve is to be sought for in the nerve-fibre itself. Our classical works tell us that the nerves borrow their force or property from the nervous centres; but this is a complete error. If a motor nerve received its properties from the spinal marrow, it ought to lose them when cut; but it does nothing of the kind; for, when the peripheric end of the cut nerve is excited, the muscles contract; and, more than this, when its nerve-force has been exhausted by long and continued excitation, it recovers its force under repose. It is strange that this simple demonstration has not convinced every one.

In considering the phenomena attending the disappearance of the nerve-force, we have to observe—1. The duration of the excitability of the nerve after section; 2. The mechanism of its disappearance.

In 1838, Müller investigated the first of these questions—the duration of the excitability of the nerve; and he concluded that it disappeared after some weeks. In 1840, Gunther and Schön made similar observations; and in 1841, M. Longet obtained similar results. It was also noted, that when, after section, the nerve had lost its properties, the



muscle to which it was distributed still preserved its power of contractility—showing the independence of muscular irritability. Brown-Séquard and Martin Magron have seen muscular irritability last longer than two years in certain animals, although every trace of excitability had disappeared in the nerve which had been cut and passed into the muscles. Another proof of the fact that muscular contractility is independent of nervous excitability has been given by M. Bernard. He has demonstrated that, when the action of the motor nerves over the muscles is absolutely arrested, muscular irritability, contractility, may still exist.

The question as to how the nerve loses its properties is of the highest interest, and its answer will give us a key to some of the most interesting phenomena which have exercised the sagacity of physiologists.

The force or property of the nerve disappears as a consequence of alteration of the nerve-substance; but this alteration is not appreciable by our means of investigation until the nerve-force has completely disappeared. The changes of degeneration which go on in the cut nerve are influenced by different circumstances. Thus the changes go on more rapidly in a young than in an old animal. In the young, the complete change is effected in about two months; but in an old animal, not before six or seven months. The species of animal and season of the year also modify the result.

According to M. Waller, the change of structure of the nerve is due to interference with the nutrition of the nerve-fibres. The spinal marrow, in his view, is the centre of nutrition of the nerves—of the motor nerves, at least; so that, when the nerve is cut, its nutrition is disturbed, and change in structure results. M. Waller cut both the roots of a spinal nerve; and he found that change of structure did not occur in both of the so cut nerves. In the anterior root, he found the peripheric end alone degenerated; and in the posterior root, the central end. Hence he drew the conclusion, that the sensitive fibres have for their nutritive centre the ganglions of the posterior roots. This deduction is strengthened by the fact that, when the posterior root was ligatured beyond the ganglion, the outer end—the peripheric—was altered in structure.

On the same basis of facts, M. Schiff has made many interesting researches concerning recurrent sensibility. He cut the anterior root, and found, as Waller had done, that the peripheric nerve-fibres were changed, and that the central ones remained healthy. But he also found that some of the fibres in the peripheric cut end of the nerve remained sound; and that some in the central end were altered. And of these fibres, those which remained unchanged in the peripheric end, and those which were altered in the central end, were evidently fibres emanating from the posterior root. Hence the conclusion that

recurrent sensibility is due to recurrent nervous fibres. How the grey substance can have a nutritive influence over the anterior root, and the ganglion over the posterior root, remains to be shown; but the fact appears certain.

In this way Waller has discovered an excellent means of studying the distribution of nerves by alteration of their fibres, and of recognising in a mixed nerve the fibres which are sensory, and those which are motor. To this method of observation Waller has given the name of "new anatomical method".

We may, indeed, expect great results from this "method" of observation. Thus, for example, we know the union of the spinal accessory with the pneumogastric nerve. Well, if we divide the roots of the spinal accessory, wherever we find in the divisions of the pneumogastric altered nerve-fibres, we may safely say that they are fibres of the spinal accessory. If, again, we wish to know whether the nervus petrosus is a branch of the facial or of the fifth pair (through the spheno-palatine ganglion), we cut the facial nerve, and examine the petrous nerve, in the course of ten to fifteen days. We then find in it a mixture of healthy and changed nerve-fibres, and from this fact are justified in concluding that the petrosal nerve has a double origin. Again, does the chorda tympani go to the tongue? No; because, after cutting the facial, there is not found in the lingual a single fibre changed, beyond the fibres the submaxillary ganglion furnishes to the gland. These are examples of the value which this new method of observation renders to physiology and pathology.

At a meeting of the Royal College of Physicians on the 30th ultimo, it was decided that in future the Harveian oration might be delivered either in Latin or English, at the option of the orator; and that the nomination of the orator for the year should be in the hands of the President of the College. As our readers are aware, the Harveian oration has hitherto been invariably delivered in Latin. It was, moreover, the duty of each senior Fellow in succession to deliver it; and if he declined doing so when his time arrived, he paid a penalty of £10. The days of College Latinity are now, however, numbered by this new regulation. Some will mourn over the departed classical glory of the College; but more will rejoice that the praises of Harvey may, for the future, be sung in his mother tongue; so that all the Fellows may be enabled, when called upon, to sing, and all to understand them when sung. The Enabling Bill, under which a lease for 999 years is to be granted to the College by the Crown, of the premises in Pall Mall, has passed the legislature. The College, on the motion of Dr. Markham, also appointed a Committee to consider the condition of the Army Medical Officers.

DR. CHAMBERS, who has lately been withdrawn from practice in consequence of the loss of a leg, has, we are happy to see, again assumed the duties of professional life. On the 1st instant, at the delivery by Mr. Toynbee of the opening address at St. Mary's Hospital Medical School, Dr. Chambers took his usual place amongst his colleagues, and, we need hardly add, received from them, and from the large assembly of medical men and students who were present on the occasion, unmistakeable signs of the warmest congratulations.

OUR readers will have been prepared for the reply of the College of Physicians to the memorial addressed to them by certain Licentiates of the Society of Apothecaries. The College could have scarcely sent any other reply. It may be, and we think it is, a great misfortune, that there is no one uniform standard of examination adopted by all examining boards throughout the country—a standard of examination which should fit the successful applicant, without any further trial of his knowledge, for admission to the licence or degree of any of our medical corporations. There certainly is something repulsive to common sense in the idea of subjecting a practitioner of mature age and large experience and practice to examination; but, in the present state of our medical bodies, it seems impossible to avoid doing so. We have had of late only too many and very uncomfortable proofs of the fact that the mere passing of examination, and of obtaining a certificated right to practise medicine and surgery, do not ensure the letting loose on the public of really qualified men. We need only refer to Dr. Parkes's famous speech given in the Medical Council of last year, and to the hundreds of *legally* qualified members of the profession who replied to the famous advertisement of the Director-General of the Army Medical Service. What answer, indeed, could be made to the Director-General, when he told the deputation, who insisted against the admission into the service of incapable men, "Why! gentlemen, these, who have responded to my advertisement, have all got double licences from your medical and surgical examining boards!" In the present perplexed state of medical examinations, it is evident that every examining and licensing board must defend its own position, and fix its own standard of requirements. The College of Physicians feels in honour bound to admit no one of whom it does not possess the proofs of sufficient capacity for receiving its licence. The College says distinctly that it does not consider the mere possession of the licence of the Society of Apothecaries a sufficient guarantee, and therefore feels bound in honour not to accept it. It is a complete error to suppose that the College does this out of any sense of pride or of gold-headed-cane reminiscences. It acts thus out of pure conscience, and, as it believes, for the good of

the profession. It has invited the rising generation of students and the existing generation of practitioners to come and join its ranks, and take the honourable title of physician. From the student it requires a stringent proof of capacity; and to the competent practitioner it has left open a means of ready entrance, by an examination adapted to his circumstances. We sincerely trust the day will come when, as we have said, the requirements of all examining boards will be equal, and when a successful candidate at any one board may (without further medical examination) seek admittance into any of our medical corporations. The only tests which would then be demanded of the applicant would be proofs of a certain age and standing in the profession, according to the standard fixed by the particular licensing board. The following is a copy of the reply of the College to the memorialists, above referred to.

"The Royal College of Physicians of London accepts the desire of the memorialists to become affiliated to the College as an evidence of the high estimation which they entertain of the College licence. The College has been induced, for various reasons, to grant its licence to those who should prove their competency to practise medicine and surgery, although not possessing university degrees; but it never contemplated the granting of its licence until the sufficiency of the candidates had been tested and approved by its own Examiners; nor does the College consider that it could, in justice to those who have complied with its full requirements, grant the request contained in the several memorials addressed to the President and Fellows."

OUR opinion has been asked in reference to the course which a medical practitioner should follow under the following circumstances. If he be engaged to attend, and is actually in attendance upon, a woman during her confinement, is he justified in leaving the woman on account of any insults which he may receive at the time from the husband or the mother of the woman? The course which, it seems to us, he should follow in such a case is this. If the insults are of a kind to make him resolve to have no further dealings with the case, he should insist that another practitioner be immediately sent for, and should deliver the case into his hands; but supposing the woman to be at a stage of delivery which requires the constant attendance of a medical man, he should not leave her until he has so delivered up the case. We cannot doubt, for a moment, that this is the proper way to proceed under such circumstances. The medical man, it must be remembered, is in attendance, not on the husband or mother who insult him, but on the wife who is blameless. Why, then, should she suffer injury, or the chance of injury, through their faults? Assuredly, the medical man is bound to maintain his position, in order to retain proper respect from his clients; and in no way could he here do it more effectually, than by demanding to be relieved of his charge, and of delivering his pa-



tient over into the hands of another practitioner. Such a procedure would give all parties time for reflection; and we have little doubt would, in most cases, elicit from the husband or mother an apology for their behaviour, and so secure a moral triumph for the medical man. Besides, we all know, that it does not do to take *au pied de la lettre* the words of people of not over-refined ways of speaking and living. Our learned judges have more than once ruled that sea-captains, for example, may have accorded to them a liberty of speech, which would not be granted to those who have to deal with a less boisterous element, and live in smoother waters. In laying down, however, the rule which we think ought to be followed in such case, we can make excuse for its infringement in particular cases. Nothing more is wanting to show the propriety of the rule than the consideration of this plain question, What degree of responsibility would attach to the medical man who thus absented himself, if any serious calamity, such as the skill of a medical attendant might have prevented, were to happen to the woman during the interval which elapsed between his departure and the arrival of another medical attendant?

THERE is one kind of marking of the British soldier to which attention has not been called; we mean the marking of him, when discharged from the service, by means of *remedial agents*, and for the purpose of preventing his re-admission into the army. We are satisfied the profession will agree with us, that so to mark a soldier is as great a degradation to the medical officer as performing the operation of tattooing. The tattooing is admittedly a punishment; but the kind of marking—cross-cupping—to which we now allude, is the practice applied to soldiers who are discharged from the army through no fault of their own, but through the infliction of disease. We know not to what extent this practice is carried at the present; but we do know that, in 1859, a general notice was issued by the late Director-General calling the attention of medical officers to the fact, that many soldiers who were sent to Chatham for their discharge “did not bear marks of medical treatment”; and informing them that every soldier brought forward “for discharge on account of medical disability must bear marks of the treatment usually adopted in practice, to show that proper medical means have been used to restore to health before he is pronounced to be unfit for service.” The Director-General then goes on to call the attention of the medical officers to the point that, “in the early stages of lumbago, epilepsy, diseases of joints, and visceral affections,” the patients would be much benefited by local depletion; and he advises, as most efficacious and economical, that the blood be extracted by cupping, instead of by leeches. We be-

lieve that it was understood, in all such cases, that the cupping should be done crosswise, and so leave a distinctive mark on the skin of the soldier. We sincerely trust that, at the present day, no army surgeon ever performs a cupping operation for the sake of permanently marking the soldier whom he is going to invalid. The practice is manifestly one which is repugnant to modern ideas of humanity and to the honour of our profession.

THE *Times* has introduced to the especial notice of the British *gobemouches* a fresh American importation—in fact, the last new thing in spirit-stirring. The Brothers Davenport are the performers on the present occasion; but these gentlemen are philosophically modest. They write to the *Times*, and repudiate the idea that the phenomena of which they are the representative agents are of “spiritual agency.” All they know is, that they know nothing whatever of the springs which impel them into such exhibitions.

“We beg to say that we do not assert that our experiments are attributable to ‘spiritual agency’, nor can we tell how they are produced. We are as anxious as the spectators can be to discover the cause of the phenomena. We profess to exercise a power of the nature and extent of which we know nothing beyond the fact that we have it. We believe that it is capable of much greater extension than we have given it; and feel not only willing but desirous of submitting ourselves, without reserve, to investigation. But in doing so, we hope that this candour on our part will be met with a fair and gentle exercise of scientific agency.”

At all events, their offer to subject their manoeuvres, or whatever *œuvres* they exhibit, to scientific eyes and intelligence, sounds candid in theory. In the meantime, we would ask how it is, that a paper which is supposed to represent the trained intellect of the country is invariably the first and foremost organ of publicity in bringing before the public, in a semi-official form, popular delusions of the character of table-turning, spirit-rapping, and so forth? How comes it that the quack gets a better hearing in that quarter than the orthodox man of science.

WE frequently read of Indian authorities accusing the apathy, and ignorance, and dirty habits of the natives, as being at the root of the fevers which so frequently decimates districts of that peninsula. But what are we to think of the apathy, and ignorance, and habits of a civilised community which, in its very heart, permits of the following state of things. Here is an official report of the state of the gaol at Calcutta:

“Mr. Strachey thus reports to the Bengal Government. ‘The only means of ventilation were afforded by a window with an iron grating at one end of the room. In front of this window, and in the open ward, were placed porous earthenware vessels, without any covers, which were used for necessary purposes.

These vessels became so filthy that many prisoners are unwilling to use them; and the result of this, and of the little care taken in cleansing the vessels, is that the whole floor, which is paved with brick, has become perfectly saturated with filth to a distance of some yards from the window; and, as before stated, the only fresh air that can enter the ward must pass over this filth before it can reach the prisoners.

"The medical officer of the gaol told Mr. Strachey, 'the atmosphere of the hospital is such that no one ought to get well in it.' There is a sort of sewer which discharges itself into the streets; and with regard to this, Mr. Rayner, executive engineer, says, 'If Calcutta were the cleanest and healthiest place in the world, that place alone would generate enough disease to sicken the whole country. And, he adds, the gaol 'has impregnated the earth round it, until a stench arises which reaches the cathedral.'"

M. Dolbeau, in the discussion on iridectomy at Paris, takes the part of Mr. Hancock's operation. His general conclusions are: that iridectomy is not required, except in subacute glaucoma; in which disease, however, it is inferior to Mr. Hancock's operation, which produces the same results with less danger. In chronic affections of the eye, with more or less complete loss of vision, iridectomy is a purely empirical proceeding. In fact, the value of iridectomy has yet to be proved. Let us, therefore, he said, not pronounce at present on the value of iridectomy, and refrain from falling into an exaggerated Germanism. M. Giralès, in reply, affirmed that the indications for iridectomy in acute glaucoma were clear, well marked, and defined with all the rigour of a geometrical theorem. It has produced marvellous results; it has been successfully employed by eminent surgeons of European fame; and it would indeed be astonishing if, after all this, the operation were a pure illusion.

M. Pasteur presented to the Academy some "charming" Mexican insects brought to France by the captain of the *Florida*—pyrophoræ. They have two small phosphorescent capsules placed behind the head, which give a magnificent light. With a single one of these insects, a person may read during the night. Mexican ladies wear them as ornaments, tied up in little bags of lace. The light emanating from them yields no rays to the spectroscope.

A new method of applying the judicial question has been suggested by M. Sédillot. Wishing to ascertain if chloroformed patients recovered the power over their volition at the moment of returning to consciousness, M. Sédillot requested several of his patients—people of intelligence—to endeavour not to reply to questions put to them on coming out of the chloroformic state. The experiment has invariably given similar results. The patients invariably forgot their promise, and answered the questions put to them. He is, therefore, satisfied that no person coming out of the state of asphyxia, whatever its cause, is able to simulate mutism, if questioned at the moment referred to. Legal medicine may, there-

fore, take advantage of this fact. If it should ever do so, let ether, he says, be employed, instead of chloroform. "Ether is expansive, joyous, indiscreet, and talkative; whilst chloroform is melancholy, morose, and silent."

Dr. Petroff (Virchow's *Archiv*) has repeated Friedrich's observations respecting the transformation of urea into carbonate of ammonia in the system. He removed the kidneys of dogs and cats, to produce uræmia; and then examined the blood, taking all possible precautions to prevent errors. The results are: that when the function of the kidneys is suppressed, carbonate of ammonia is formed in the blood; that injections of carbonate of ammonia into the blood produce phenomena precisely similar to those of uræmia; that the degree of intensity of the symptoms produced, and their character, depend upon the quantity of ammonia contained in the blood, and upon the state in which it exists in the blood.

M. Grisolle has been appointed Professor of Clinical Medicine of the French Faculty, in place of M. Rostan, who has retired therefrom. M. Trousseau gives up his chair of clinical medicine, and returns to his old chair of therapeutics, vacated by M. Grisolle. M. Trousseau gives an interesting account of the reasons of this change, so far as he is concerned.

"During twelve years I have been clinical professor. Last year, I begged permission to retire from the duties of teaching; but the minister refused me, although I could have appealed to the Council, having been thirty-two years professor, and being sixty-two years of age. I therefore consented to remain one year longer clinical professor. The easy speech and lucidity of discourse attributed to me, it is true, are natural gifts, perhaps; but they have not been obtained without great labour. Every morning at six I am at work, and so again in the evening. I consider clinical instruction a serious business, and therefore make myself acquainted with everything that is going on. This work has injured my sight; and, after much correspondence with the Dean and the Minister, I have consented to return to my old chair of therapeutics, and remain physician of the Hôtel-Dieu; and hope that a few years more of my active old age may be of service to the students. Much would I have preferred a retreat, for I have well earned it; but I could not resist the entreaties of the Dean."

Never, says M. Diday, has constitutional syphilis been seen to follow a *chancroid* ulcer; that is, a primitive ulceration, which appears to be soft, which is without incubation, is reinoculable, and not indurated. Syphilitic infection never occurs unless the chancre which produced it is accompanied with specific glandular action.

In an article in *L'Union Médicale*, on the Hospitals of London, we read:

"The offices of assistant physicians and surgeons are not honorary. The emoluments attached to them are often greater than that of the physicians and surgeons—a fact which is readily explained by the large amount of time occupied in their consultations!"



# Association Intelligence.

## BRANCH MEETINGS TO BE HELD.

| NAME OF BRANCH.                                | PLACE OF MEETING.                  | DATE.                                |
|--|------------------------------------|--------------------------------------|
| BIRMINGHAM AND MIDLAND COUNTIES.<br>[General.] | Birmingham Library,<br>Birmingham. | Thursday,<br>October 13th,<br>6 P.M. |
| METROPOL. COUNTIES.<br>[Special General.]      | 37, Soho Square.                   | Thursday,<br>Oct. 13, 4 P.M.         |
| WEST SOMERSET.<br>[Quarterly.]                 | Clarke's Castle<br>Hotel, Taunton. | Thursday,<br>Oct. 13, 7 P.M.         |
| BATH AND BRISTOL.<br>[Ordinary.]               | Victoria Rooms,<br>Clifton.        | Monday,<br>Oct. 17, 7 P.M.           |
| SOUTH MIDLAND.<br>[Autumnal.]                  | Buckingham.                        | Tuesday,<br>Oct. 18, 1 P.M.          |

## SHROPSHIRE ETHICAL BRANCH: SPECIAL NOTICE.

IN consequence of the illness of the Honorary Secretary, the annual meeting is unavoidably postponed until further notice.

The members will please to accept this intimation in lieu of a circular note.

S. B. GWYNN, *President.*

October 4th, 1864.

## WEST SOMERSET BRANCH.

A QUARTERLY Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Thursday, Oct. 13th, at 7 P.M.

Notice of Papers or Cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D., *Hon. Sec.*

Taunton, September 1864.

## METROPOLITAN COUNTIES BRANCH: NOTICE OF MEETING.

A SPECIAL General Meeting of the Metropolitan Counties Branch will be held at 37, Soho Square, on Thursday, October 13, at 4 P.M.

*Business:* To elect three Directors of the Medical Provident Fund.

A. P. STEWART, M.D. } *Hon.*  
ALEXANDER HENRY, M.D. } *Secs.*

London, October 6th, 1864.

## BATH AND BRISTOL BRANCH.

THE first Ordinary Meeting of the session will be held in the Victoria Rooms, Clifton, on Monday evening, October 17th, at 7 o'clock; R. W. FALCONER, M.D., *President*, in the Chair.

The first business of the meeting will be to elect two members of the Branch as Directors of the Provident Relief Fund of the Association.

H. MARSHALL, M.D. } *Hon. Secs.*  
R. S. FOWLER. }

Clifton, October 1st, 1864.

## SOUTH MIDLAND BRANCH.

THE Autumnal Meeting of the South Midland Branch will be held at Buckingham, on Tuesday, October 18, at 1 P.M.; H. VEASEY, Esq., *President*.

Gentlemen intending to read papers or cases, are requested to forward the same, as early as convenient, to Dr. Bryan, Northampton.

JOHN M. BRYAN, M.D., *Hon. Sec.*

Northampton, September 1864.

## MEDICAL PROVIDENT FUND.

THE Chairman of the Directorate has received intimation of the following appointments of Directors by the Branches.

*South Midland Branch.* Henry Veasey, Esq. (Woburn); Edward Daniell, Esq. (Newport Pagnell); John M. Bryan, M.D. (Northampton).

*Reading Branch.* George Pound, Esq. (Odiham, Hants).

*Lancashire and Cheshire Branch.* George Southam, Esq. (Manchester); Edward Waters, M.D. (Chester); Lorenzo E. Desmond, M.D. (Liverpool).

*East Anglian Branch.* Edward Copeman, M.D. (Norwich).

*South-Eastern Branch.* John Armstrong, M.D. (Gravesend); Edward Westall, M.D. (Caterham, Surrey); Henry Collet, M.D. (Worthing, Sussex).

*Shropshire Scientific Branch.* Samuel Wood, Esq. (Shrewsbury).

*East York and North Lincoln Branch.* Sir Henry Cooper, M.D. (Hull).

*South-Western Branch.* Joseph C. Cookworthy, M.D. (Plymouth); Philip C. De la Garde, Esq. (Exeter); Thomas L. Pridham, Esq. (Bideford).

## SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

THE first meeting for the eighth Session, 1864-5, was held at Rochester, on Sept. 30th; ADAM MARTIN, M.D., in the Chair. Nine members and visitors were present.

The Treasurer and Secretary were re-elected.

*New Member.* Alfred Monckton, Esq., of Brenchley, Kent, was elected a new member.

*Communications.* The following communications were made:—

1. Difference in the Susceptibility of Joints. By J. V. Bell, M.D.

2. Specimen of Ossification of the Larynx, and Death by Dysphagia: with Remarks. By J. Armstrong, M.D.

*Discussions.* 1. Respecting the Provident Fund, it appeared that the appointment of three Directors instead of two by the South-Eastern Branch was owing to the increase of members brought about by the district meetings held in Kent (East and West).

2. The consideration of the following questions was adjourned to the next meeting:—

Advisability of diminishing the amount of district subscriptions (now 2s. 6d.)

Advisability of holding meetings (few or many at will) at the hospitals within the district.

Advisability of limiting the number of dinners to one or two in the session, and of diminishing the charges of dinners.

*Dinner.* After the usual vote of thanks, the members and visitors adjourned to dinner.

THE MEDICAL ACT. Mr. Paget, of the Thames Police Court, has considered his decision in reference to the Medical Act. Mr. Fentiman, a chemist, was charged before him with a breach of the Act in having described himself as a surgeon; and Mr. Paget ruled that the matter complained of was not a breach of the Act. Subsequently, however, his attention was called to another report of the case to which he had alluded, and after reading it he decided that Mr. Fentiman had been guilty of a breach of the Medical Act. Mr. Fentiman promised not to offend again, and on this understanding the case was adjourned for a month, when it is to be brought forward again should the defendant not have kept his promise.

## Reports of Societies.

### BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[Held at Bath, September 1864.]

*The Dietary Question: the President's Address in Sub-Section D (Physiology).* By EDWARD SMITH, M.D., LL.B., F.R.S. The author adverted to the fact that, out of 7000 poor-law dietaries of paupers in workhouses, not two were alike. The condition of the dietary of the army and navy was until recent years most deplorable. At the latter end of the last and early part of the present century, scurvy was rife in our national navy; and inquiries made by Dr. Budd twenty years ago, and by Dr. Barnes this year, had shown that this disease was still not unfrequent in our merchant navy amongst the ill-fed seamen. The state of the dietary in our prison population was very unsatisfactory. In several instances it had been found requisite to diminish the allowance of food to convicts; while in others it had been increased. These changes had been made on insufficient grounds; and he suggested that a government officer should be appointed to make the requisite scientific inquiries. With regard to dietary in hospitals, at the present there was a great difference. There was the best reason to believe that the dietary of private schools and colleges and charitable institutions for the maintenance and education of the young, had greatly improved; but it was a subject which should demand public attention. There were many cheap schools in the country, in which the sum paid with the pupils was manifestly inadequate to remunerate the proprietors. A consideration of the dietary of the general community must have regard to two classes at least—the middle and higher classes and the labouring classes. With regard to "Bantingism", he said that he was not concerned in the medical question as to whether it was desirable to reduce the bulk of a given individual; but he thought it would be an evil to this nation, both bodily and mentally, if the system of reduction were to become at all general; and that, on the contrary, regarding the whole population, we needed to add to rather than take from the weight of the body. Even in the well-fed classes, he had seen very serious diminution of both bodily and mental vigour follow the working out of the plan. There was no necessity for the absolute excision of fat and sugar, and the extreme reduction in the quantity of bread, any more than for the great increase in the quantity of meat. The bulk of the body might be reduced, with less danger to health, by gradually lessening the amount of the kinds of food usually taken. An inquiry had just been completed by him for the government, which would afford a clearer insight than had hitherto been obtained into the dietary of our labouring population. It had been made at the houses of the agricultural labourers in every county in England, in Wales, the west and north of Ireland, and the west and south of Scotland, at the houses of certain town populations, silk and cotton weavers, etc. The coarse kinds of bread which were in ordinary use by our forefathers, even to the early part of the present century, were now very rarely eaten. Barley-bread was still eaten in the houses of labourers in South Wales, and in the farm-houses of North and South Wales; also, in Northumberland and Cornwall and Devon, and in the

southern parts of Scotland. Rye-bread was nowhere eaten alone. Oatmeal was used by twenty per cent. of the farm-labourers in England. Indian corn was used exclusively in the south of Ireland. Pea-meal was never eaten alone as a bread; but in the north of Scotland it was sometimes added to oatmeal. Rice was used by about fifty-eight per cent. of the population; but never as a breadstuff. The average weekly dietary of farm-labourers was—for each adult and child, 13½ lb. of breadstuff, 6½ oz. of sugar, 5 oz. of fat, 14 oz. of meat, 52 oz. of milk, 5 oz. of cheese, and ½ oz. of tea; whilst in-door labourers obtained 9½ lb. of breadstuff, 8 oz. of sugar, 5 oz. of fat, 13½ oz. of meat, 18 oz. of milk, and ¾ oz. of tea for each adult weekly. In reference to public institutions, he was of opinion that there should be a government officer of the highest repute upon dietary questions, to whom such questions should be referred by the government; that in the dietaries of the poor, the wives and children are ill-fed, much more so than the husbands; that a large part of the infant mortality and the deaths at puberty from consumption, is due to a deficient supply of milk and of other good food, and the almost exclusive use of slops. A man's first duty was to provide sufficient nourishment for his family, even if it were only dry bread; and until this had been effected, nothing should be spent merely to please the taste; and in order to turn the labourer's overtime to profitable account, it was very desirable that he should have the opportunity of growing plenty of potatoes.

*Nutritive Value of Foods: Dietary of the Labouring Classes.* By EDWARD SMITH, M.D., F.R.S. There were four methods in use in estimating the nutritive value of foods; 1, the weight of the food; 2, the nitrogenous and carboniferous elements in food; 3, the nitrogen, carbon, and hydrogen (reckoned as carbon) in food; 4, the nitrogen and carbon in food. *Weight.* To estimate the relative nutritive value of dietaries by the gross weight of the food supplied, assumes that there are no material differences in the nutritive elements of food, or, if there are material differences in the construction of dietaries, there is such an uniform relation between the quantities of the several kinds of food of which they are composed, that no important fallacy will be admitted. It is also usual in this method to omit all reference to fluid foods, and to limit the calculation only to the so-called solids. In each of these there is great error. Thus, one pound of potatoes is only equal to one-third pound of bread in carbon, and to one-fifth pound of meat in nitrogen; and one pound of meat is equal to two pounds of rice in nitrogen; and one pound of peas is equal to one half-pound of fat in carbon, but contains as much nitrogen as is found in five pounds of rice, whilst the fat contains none. Again, it is absurd to place milk and beef-tea and gruel in the same class with water and tea, and omit reference to all alike, because they are fluids; whilst one pint of new milk contains as much nitrogen as is found in nearly half a pound of bread, or five ounces of meat, and as much carbon as is found in three-quarters of a pound of potatoes. 2. *The Carboniferous and Nitrogenous Elements.* When the estimation is made upon these bases, it is not indicated that these two elements are separately found in foods, so that some foods are purely carboniferous, and others purely nitrogenous, but in most kinds of foods both elements are found in combination. It is, however, true that, whilst there are no foods composed of nitrogen only, there are some into which nitrogen does not enter, such as fat and sugar; and starch contains carbon very largely, and may be artificially obtained without nitrogen, but in nature is always associated with nitrogen. Hence, before we can value this mode of estimation, we must know



what amount of these two classes of elements exist in each separate food. The calculation, however, was one of so great complexity, that Dr. Smith thought it should give place to an easier and more complete method of estimation. 3. *The Carbon, Nitrogen, and Hydrogen (Reckoned as Carbon.)* In this method the carbon and nitrogen contained in all the elements of which a given food is composed, have been calculated in the percentage quantities; but, in addition, the free hydrogen, viz., that quantity of hydrogen, which is in excess of the oxygen in the food with which it could have entered into combination, has been calculated and added to the carbon, and the whole entered as if it were carbon. This has been done upon chemical grounds, and based upon the two great distinctions of action which chemists have assumed to exist in the heat-generating and the flesh-forming; and as both carbon and hydrogen, when combined with oxygen, give out known quantities of heat, the heat-generating powers of the free hydrogen have been added to those of the carbon. The free hydrogen reckoned as carbon in fats is very considerable, whilst in starchy food it is small. Thus, in butter, suet, lard, bacon, and mutton, it is in their order 27, 28, 31, 23, and 14 per cent., and in wheat, flour, bread, maize, oatmeal, and rice, it is 0.3, 0.25, 1.8, 1.6, and 0.24 per cent. If the sole object which could be had in view, in determining the amount of carbon in food, were to ascertain the quantity of heat which they could generate, this method might be allowed; but even then it would be much more satisfactory that the term carbon should represent carbon only, and not the free hydrogen also. But the object of a physiologist when estimating the value of a dietary, is to compare the quantity of the nutritive elements in the food with some standard requirement, such as would be derived from a knowledge of operations, proceeding in the body of the person to be fed; a knowledge of the necessary quantity of heat might probably be such a standard, if it existed, but no one pretends to have discovered it. The free hydrogen probably chiefly unites with oxygen and forms water; and, if we knew the quantity of water thus generated, it might be used as a standard wherewith to measure the requirement for hydrogen; but we cannot tell how much water is retained in the body, or how much water leaves the body; and of the water leaving the body, how much was taken into the body as water, and how much is thus generated. The carbon itself, which is required, can be estimated from the quantity of that substance which leaves the body—as carbonic acid by the lungs and skin, as unassimilated compounds of carbon in the feces, and in saline compounds in the urine; and so of the nitrogen, which is eliminated chiefly as urea in the urine, and as unassimilated compounds of nitrogen in the feces. The only source of fallacy in these estimates is the amount of these substances which are retained by the body. 4. *Carbon and Nitrogen.* The most complete, as well as the simplest method of estimation of the nutritive value of foods, is to calculate the carbon and nitrogen in the whole of any food, without reference to the compound elements which the food may contain. Dr. Smith had constructed tables which show at a glance the quantity of each element which is found in every weight of food; from such tables, the total nutritive value of a dietary may be calculated on in a few minutes instead of a few hours. He earnestly recommended this method for universal adoption by scientific men. He had not referred to all the constituents of foods, as, for example, the saline substances; because in mixed dietaries which contain a sufficient amount of carbon and nitrogen, there is almost universally a sufficient amount of saline ingredients, except common salt, and this is as universally supplied in addition

to foods. Dr. Smith then proceeded to consider upon what basis dietaries should be calculated.

*The Physiological Effects of Tobacco.* By B. W. RICHARDSON, M.A., M.D. Without being a devotee to tobacco, Dr. Richardson had for many years often smoked. He did not come before the section biased in any degree; but simply as a man of science, who had tried to comprehend the facts of the whole question. He referred to the following subjects. 1. The composition of the products of combustion of tobacco, chemically and physically. 2. The physiological action of the various compounds thus derived. 3. The effects of ordinary and excessive smoking on the organs of the body. He gave the following summary of the conclusions at which he had arrived. 1. The effects that result from smoking are due to different agents imbibed by the smoker; viz., carbonic acid, ammonia, nicotine, a volatile empyreumatic substance, and a bitter extract. The more common effects are traceable to the carbonic acid and ammonia; the rarer and more severe to the nicotine, the empyreumatic substance, and the extract. 2. The effects produced are very transitory, the poisons finding a ready exit from the body. 3. All the evils of smoking are functional in character, and no confirmed smoker can ever be said, so long as he indulges in the habit, to be well; it does not follow, however, that he is becoming the subject of organic and fatal disease because he smokes. 4. Smoking produces disturbances: (a) in the blood, causing undue fluidity, and change in the red corpuscles; (b) on the stomach, giving rise to debility, nausea, and, in extreme cases, sickness; (c) on the heart, producing debility of that organ, and irregular action; (d) on the organs of sense, causing, in the extreme degree, dilatation of the pupils of the eye, confusion of vision, bright lines, luminous or cobweb specks, and long retention of images on the retina: with other and analogous symptoms affecting the ear—viz., inability clearly to define sounds, and the annoyance of a sharp ringing sound like a whistle or a bell; (e) on the brain, suspending the waste of that organ, and oppressing it if it be duly nourished, but soothing it if it be exhausted; (f) on the nervous filaments and sympathetic or organic nerves, leading to deficient power in them, and to over-secretion in those surfaces over which the nerves exert a controlling force; (g) on the mucous membrane of the mouth, causing enlargement and soreness of the tonsils (smoker's sore-throat), redness, dryness, and occasional peeling off of the membrane, and either unnatural firmness or contraction, and sponginess of the gums; (h) on the bronchial surface of the lungs when that is already irritable, sustaining the irritation, and increasing the cough. 5. The statements to the effect that tobacco smoke causes specific diseases, such as insanity, epilepsy, St. Vitus's-dance, apoplexy, organic diseases of the heart, cancer and consumption, and chronic bronchitis, have been made without any sufficient evidence or reference to facts, and can never accomplish the object which those who offer them have in view. 6. As the human body is maintained alive and in full vigour by its capacity, within certain well defined limits, to absorb and apply oxygen; as the process of oxydation is most active and most required in those periods of life when the structures of the body are attaining their full development; and, as tobacco smoke possesses the power of arresting such oxydation—the habit of smoking is most deleterious to the young, causing in them impairment of growth, premature manhood, and physical degradation.

*The Various Forms assumed by the Glottis.* By G. D. GIBB, M.D. The author stated that it had been an accepted axiom that, for the most part, the glottis assumed a triangular form; and this view was taught

almost to the present hour. He briefly considered the relation that subsisted between the true vocal cords and the thyro-arytenoid muscles; and he then made some observations upon, and described the arrangement of, the muscular fibres, especially as lately made out by M. Battailhe. He adopted that author's division of the muscle into three bundles, and approved of the name of triceps laryngea, which he had given to it. He then described the manner of action of the various fibres, and their influence in giving a form to the glottis. This varied from an isosceles, equilateral, or right-angled triangle, to a lozenge or barrel, circular, oblong, lanceolate, elliptic, pyriform, or arched and linear form. The commonest of these was an isosceles triangle; and a rare form was a right-angled triangle, which he had never met with unless in women, when the larynx is shallow from below backwards. A parallel or oblong glottis he explained; he had seen it several times, but necessarily narrow, because the vocal cords, under such circumstances, could not be separated more than one or two lines at their point of origin. A more remarkable form than any other was the reversal of the triangle; the glottis during the utterance of continuous falsetto sounds assuming the shape of a narrow Y, then a narrow V, and then a narrow oblong, before the termination of the experiment. A pear or bulbous shape, and an arched form, composed of the narrow segment of a circle, were other forms noticed. He concluded with some observations on the form of the glottis seen in the chest and falsetto registers, and the parts in action.

*Valves in the Abdominal Veins.* By EDWARDS CRISP, M.D. All physiologists, Dr. Crisp said, up to the time of his discovery of valves in the splenic vein of the giraffe in 1852, had denied the existence of these valves. Kölliker, in his article on the Spleen, in Todd's *Cyclopædia*, says that the abdominal veins contain no valves; and Dr. Carpenter had made the same assertion. The physiological import of these valves in the abdominal veins of many animals was most important; and it was strange, considering their abundance, that they had not before been discovered. Dr. Crisp had not only in 1852 described these valves, but in his book on the use of the spleen, and in other places, he had pointed out a valvular arrangement in the abdominal veins of man and the lower animals. A diagram was shown of one of the mesenteric veins of the reindeer, which contained forty-two pairs of valves; of the left renal vein of the nylghau, which contained ten valves, two single and four pairs; of the renal vein of the Sondial ox (*Bos sondiacus*), from Pegu, the only specimen brought to Europe, in the renal vein of which there were two pair of valves. Unlike our ox, this animal had a non-lobated kidney. A drawing of the stomach and spleen of the horse was also exhibited. Dr. Crisp had found valves in the abdominal veins in various carnivora, marsupialia, pachydermata, and ruminantia; which he enumerated.

*A Supplemental System of Nutrient Arteries for the Lungs.* By WILLIAM TURNER, M.B. An arterial plexus was described on the side of the pericardium beneath the mediastinal pleura. It was formed by the junction of the pericardiac, mediastinal, and phrenic branches of the internal mammary artery with each other, and with numerous fine branches derived from the trunks of the intercostal arteries. From it a number of slender thread-like arteries passed to the lung, some in front of its root, others behind, and others between the layers of the ligamentum latum pulmonis. Some of these arteries were distributed in the substance of the lung, others on its surface beneath the pulmonic pleura. Through the agency of this subpleural mediastinal plexus, an

arterial communication is established between the vessel of the lung and the arteries which supply the wall of the chest.

## Correspondence.

### THE LANCET, AND THE BRITISH MEDICAL JOURNAL.

SIR,—I have only this afternoon seen the *Lancet*, and fear I may be too late with the few hurried observations I should wish to make on the letters it contains respecting the BRITISH MEDICAL JOURNAL.

You will, no doubt, if you think it worth the trouble, reply to the leading article; I will confine my remarks to the correspondence; but, as the *Lancet's* rendering of the motto, "*Audi alteram partem*," with which that department is headed, is "Hear our side," I shall indirectly be answering it. The case is simply this. Every year the Association is joined by many new members. A certain proportion of the new associates, looking over their JOURNAL, will come to the conclusion that the *Lancet* is a luxury they can dispense with for the future. The *Lancet*, seeing this, with the instinct of self-preservation, raises the cry, "Down with the JOURNAL." Well; the *Lancet* pipes and the correspondents dance—each his own *pas*, perhaps, but all to the same tune.

The antics of Dr. Bree are the most entertaining. He seems to have taken up the notion that he is to attain an immortality of fame as the founder of a new Association; and I think it has got into his head, as we say of wine. He is evidently quite above anything like logical precision in his statements. Every sentence in his letter would pay for analysis in the amusement it would afford; but to discuss with him would be to beat the air. The Association which is to combine "science, justice, and charity," is certainly too good for this world; and I have not time to follow Dr. Bree into the clouds.

Mr. Carter has a penny whistle of his own—his view on the Provident Fund question; to which one would have been inclined to pay more attention, had he not taken up the *Lancet* tune of "Down with the JOURNAL." He, too, has a scheme. The JOURNAL is to be replaced by a quarterly; the editor to be able, learned, judicious, well known, etc.—suppose we say Mr. Carter himself. The contributors to be well paid—who might not hope to put a hand into the Association purse? The articles to be on matters of interest and importance to the profession; and a list of subjects is already suggested, singularly corresponding with those discussed in the JOURNAL during the past year. But you go too fast, Mr. Carter! The JOURNAL is not yet strangled; and, in spite of your threatened denunciations at the next meeting, and the next, and the next, I do not think you will have the satisfaction of "tooting" your whistle over its grave. When that comes to pass, it will be time enough to issue the prospectus of your quarterly.

Then comes "Adsum," or "Here we are again," if I may be permitted to give a free but apposite translation of the signature. He gravely announces that he is not a member of the Association, and proceeds to meddle in its affairs; thus he goes through his paces. This letter looks like an article supplied to order.

"Our Mutual Friend," as the next on the list may be called, challenges the editor of the JOURNAL to some curious sort of poll; for which he is patted on the back by the editor of the *Lancet*. He offers to pay the expenses incurred, should the result be against



himself; but it is amusing to see that he becomes alarmed lest his proposal should be taken *au sérieux*. What a joke! and, in a postscript, he inserts a saving clause through which he might sneak out in case this should happen. The scheme does not require even a momentary consideration.

The last on the list of correspondents takes a line of his own, which has no real bearing on the question of JOURNAL or NO JOURNAL. It is a personal attack on you, sir, of the vilest kind, and made in the most cowardly way. There is no straightforward statement in the letter; and the insinuations, though dark enough, are most clumsy. Such is my abhorrence of so unmanly an attempt to take away the good name of any one, that I would at once cease to take in a paper which admitted it. I have often heard it stated, as one of the main qualifications of the present editor of the *Lancet*, that "he has a fine scent for a libel." This letter smells abominably of something; whether it is the exact odour of a legal libel, I am not prepared to say.

Leaving this unpleasant topic, let me say one word on the question at issue. The object of the British Medical Association is not, and never was, to succour decayed medical men, or to protect individuals against iniquitous law-suits, or to prosecute quacks; and it is simply absurd to talk about the good that might be done in these ways with the Association funds, were they so applied. Gentlemen who are so anxious on these points can subscribe to the Medical Benevolent Fund, or to any special funds they like. The *Lancet* is, of course, prolific in suggestions. Encourage science; pay a barrister to protect the interests of the profession in the House of Commons; do anything but support a JOURNAL. Why, a JOURNAL offers the only means of carrying out the objects of the Association—to band the profession together; to unite the scattered members in common action for great purposes; to create and keep up a professional public feeling. How many of our members can attend the great meetings? and who would feel that he belonged to a great Association, if all he heard of it was a quarterly volume of dry *Transactions*? The JOURNAL brings this home to us week by week; and is it not a well known fact that the prosperity of the Association has varied according to the vigour with which the JOURNAL has been conducted? Let me say, in conclusion, sir, that our increasing numbers and the outcry of the *Lancet* are equally testimony to the value of your services. I am, etc.,

AN ASSOCIATE.

Sept. 25, 1864.

## OPERATIONS ON THE EYEBALL.

LETTER FROM JABEZ HOGG, Esq.

SIR,—I trust you will permit me to offer a few remarks, on the latter part of Mr. Solomon's paper, as it appears in your JOURNAL of Saturday last. This gentleman has made it appear that his object in referring to a correspondence in the *Lancet* so far back as 1862, is solely that of setting himself right with the members of the Association; but, as he could not accomplish this without very gravely impugning the statements contained in that correspondence, he does it, and leaves the person to his remedy, an appeal to your pages. It is, perhaps, generally known that I wrote the letter in question; and it is equally well known that I did so in vindication of the just right and claim of my friend and colleague, Mr. Hancock. My object is tolerably clear, also; that of maintaining the truth as to who is to be considered the originator of division of the ciliary muscle. I am, therefore, not a little surprised, that Mr. Solomon should refer to that correspondence at all; and more

to mystify than to bring out the truth in bolder relief. He certainly mystifies, when he mixes it up with talk about "his claim to priority," etc., because he published a something in your columns on May 26th. By taking such a course, he is very likely to be still misunderstood, as meaning to imply that he lays claim to priority of performing the operation, rather than that of applying the operation of another in cases of myopia, which he publishes on the 26th of May, 1860.

I must here observe, however, that I am exceedingly glad to find Mr. Solomon now so reasonable, that I would rather take the opportunity of helping to set him right, than the most unpleasant one of finding fault; and can assure him, if the claim he now makes for priority adds in the smallest degree to his happiness, I shall not attempt to disturb it. Nevertheless, he might have made all this apparent to your readers, without in any way appearing to impute motives to me, and talking of "producing evidence in refutation of statements," etc., because what I stated in the pages of the *Lancet* in 1862 can be supported by trustworthy evidence, *his own letters*. At that time, I promised to publish more of these letters if he called for them; to show that Mr. Solomon is entirely indebted to Mr. Hancock for putting him into possession of certain facts with regard to his operation of division of the ciliary muscle; and even all his knowledge, that of its application, was suggested by these letters, and by the papers published in the pages of the *Lancet*, September 7th, 1859, and February 11th, 1860; previous to which such an operation, or its application in cases of myopia or any other disease, never so much as entered the brain of Mr. Solomon, or any other man.

Therefore, it becomes quite clear, that the production of subsequently written letters, dated May 17th, 18th, etc., in no way invalidates my former statement; and with regard more particularly to the publication in your JOURNAL, on May 26th, 1860, of Mr. Solomon's paper, it in no way goes to prove that he was entitled to be considered the originator of any new operation for the relief of myopia; nor does it at all exonerate the studious omission of all reference to Mr. Hancock's name or operation, and subsequent invention of another term to express the then already well known division of the ciliary muscle.

With regard to Mr. Solomon's accusation, that I purposely omitted the date from a letter of his which I published in the *Lancet*, that I most positively deny. I send you the letter herewith, that you may see the omission was his own. The letter bears no date.

I can only add, in conclusion, that, if by stubbornly maintaining my point I have made myself at all disagreeable to Mr. Solomon, I am sorry for it. He has, however, himself to blame, for not having, in his reply to my first letter, put the matter in the light he now puts it; viz., that of a claim for priority of application of Mr. Hancock's operation in cases of myopia.

I am, etc.,

JABEZ HOGG.

1, Bedford Square, Sept. 27th, 1864.

## MEDICO-LEGAL POST MORTEM EXAMINATIONS.

SIR,—In the JOURNAL for September 17, you copy from the daily press, a statement made by Dr. Lankester, in the capacity of coroner, to the effect that, "when he ordered a *post mortem* examination to be made, it was to be a thorough and not a partial examination; all the organs were to be tested, as poison had frequently been found when there was no suspicion of the kind having existed." I quote the statement as it stands.

I am rather surprised that this statement has elicited no comments; and would ask a little space to make a few remarks on it.

With regard to the coroner's authority to order the profession in these terms, I do not know that that stands for much. Speaking under correction, I believe it would be merely a question whether any one would forego his fee for making the examination, or incur the expense, which his fee would not cover, of testing all the organs for poison. The general observation of this order would not have the effect of aiding justice. For, I suppose that, in nine-tenths of the cases, the organs would be so spoiled by inexperienced hands, as to prevent any safe conclusions from being drawn from their condition, in really important cases, by practised analysts.

If Dr. Lankester would direct a policeman to attend at each *post mortem* examination which he orders, provided with proper jars and bottles in which to take any organs or secretions away for special analysis, this would be a very useful measure. And if he would make a point of asking particularly about the condition of the several organs, in cases where the cause of death was not quite obvious, he would ensure all examinations being strictly and thoroughly made; the more so, if the services of a skilled analyst were known to be always readily available. And if, besides this, Dr. Lankester would, at his leisure, carefully draw up a short set of rules for medico-legal examinations, he would confer a great service on his less accomplished brethren. For it must be remembered, that the bulk of those inquiries do not fall to the lot of those who have varied knowledge and leisure and money to spare; but to the hard-worked parish-surgeon, who has neither the time or knowledge for abstruse chemical inquiries, nor the money to spend in employing others to do them for him. By so doing, Dr. Lankester would earn the gratitude of his profession, the ends of justice would be aided, and the scientific character of the coroner's court would be much raised.

I am, etc.,

E. L. O.

Sept. 29, 1864.

## SCARLATINAL RASH AFTER OPERATIONS.

LETTER FROM SAMUEL WILKS, M.D.

SIR,—Mr. Harrinson, of Reading, asks, in your JOURNAL, for further information respecting a scarlatina-like rash which is sometimes seen to follow operations.

I regret that I cannot furnish him with the details of any cases; but the numerous instances which have come before me lead me to believe that the fact must be well known to every surgeon. Ever since I have known the practice of Guy's Hospital, I have constantly visited the surgical wards to give an opinion about a rash in a patient who has recently undergone an operation; and this rash generally resembles scarlatina.

It is, also, well known, that puerperal women are often said to die of scarlatina taken soon after labour; and here it may be suggested, whether the rash be not due to some special condition of the system existing at that time.

I do not allude to eruptions which may be seen in cases of pyæmia and other blood-poisons; for these are generally of an erythematous or roseolous kind; whilst the scarlatina-like rash occurs soon after operations, and before there is any evidence of pyæmia.

Mr. Harrinson relates a case which he treated in conjunction with Mr. Hutchinson. I think the last-named gentleman could mention several cases where an eruption followed the operation of lithotomy in the London Hospital not many months ago. The

subject is one of much interest; and I hope Mr. Harrinson will be able to collect several well reported instances of the affection.

I am, etc.,

SAMUEL WILKS.

11, St. Thomas Street, Southwark, S.E., Oct. 1, 1864.

## SCALP-WOUND, FOLLOWED BY SCARLET RASH.

LETTER FROM GEORGE MAY, JUN., Esq.

SIR,—On the 27th of last September, H. R., aged 10, was brought to me with the following history. On Saturday, August 27th, he fell, and struck the back of his head, causing a wound about an inch long. This was closed by strapping, and he seemed to be perfectly well until six days after the injury. He was then found moaning in bed, with much pain and tenderness in the back of the neck. The following day, he was very feverish, with a scarlet rash, but without sore-throat. On the wound being opened, some offensive pus escaped. The rash lasted a few days; and complete desquamation of the skin followed. He gradually recovered; but on September 24th, he again became feverish; and on the 26th, he complained of great pain in the left foot, with inability to stand.

I found him pale and feeble, with a frequent pulse, and the skin still rough and desquamating. The glands on the left side of the neck were swollen and tender. He complained of much pain when the tarsal bones of the left foot were pressed; but there was no swelling. I believe the patient had previously suffered from scarlatina; at all events, there was not any case in the village at the time of his illness; neither was any one in the house affected by it. The illness was attributed to scarlatina; but was more probably due to the absorption of poisonous matter from the wound; and at the time I saw him, he was threatened with secondary abscesses.

I am, etc.,

GEORGE MAY, JUN.

Reading, Oct. 4th, 1864.

HOSPITAL NUNS. Miss Nightingale seems to infer that if the entire establishment be administered by hospital nuns, Protestant or Roman Catholic, there will be lower average care of the sick, as "the idea of the 'religious order' is always more or less to prepare the sick for death." This opinion I cannot support; for I, in common with all other medical officers of hospitals under the care of religious orders in this city, have certainly never had to complain of want of anxiety for, or attention to, mundane matters on the part of these sisters. (*Dr. Mapother.*)

HEALTHY STABLES. In the annual review of the progress of hygiene presented to the Army Medical Department by Professor Parkes, and just issued, notice is taken of the recent report on cavalry stables, made by the Barrack Improvement Commission. The question is entirely solved whether or not the men should be placed over the stables. The stables cannot be properly ventilated or lighted if the men's rooms are overhead. In some of the cavalry stables examined, the air was so foul that it was matter of surprise how animals could breathe it and retain any measure of health. In the old troop stables at Hounslow each successive horse, from the corners to the centre, is supplied with air fouled more and more by the other horses. The inquiry has shown beyond question that the best form of building is a one-storied stable and only two rows of horses, the ventilation to be by the roof, carried from end to end, and giving four square feet of ventilating outlet for each horse. The stables recommended to be built in future would give each horse 100 feet of superficial area and 1,605 cubic feet.



## Medical News.

**ROYAL COLLEGE OF PHYSICIANS OF LONDON.** At a general meeting of the Fellows, held on Friday, September 30th, 1864, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College:—

Fox, Cornelius Benjamin, M.D. & Din., Truro, Cornwall  
Stevenson, Thomas, M.B.L.M.D., Guy's Hospital

At the same meeting, the following gentlemen were reported by the examiners to have passed the Preliminary Examination in the subjects of General Education:—

Boyd, William Bernard, Wells, Somerset  
Fox, Alexander, Stoke Newington  
Gittens, Thomas Joshua, Barbadoes  
Guy, Frederic George, Shoeburness  
Hewley, Anthony Alfred, Ringwood  
Minter, Edward Withers, Southsea  
Parker, George Hargrave William Broughton, King's College  
Sutchife, Henry, Rochdale

**APOTHECARIES' HALL.** On September 29th, the following Licentiates were admitted:—

Birt, Joseph, Grove House, Leamington  
Bush, Henry John Ryder, Warwick Street, Regent Street  
Fowler, George, jun., Newington Terrace, Kennington Park  
Metcalfe, Fenwick, Wisbeach, Cambridgeshire  
Owen, David Charles Lloyd, Smethwick, Birmingham  
Phillips, George Richard Turner, Leinster Square, Hyde Park  
Ryder, Henry Thomas, Upper Fitzroy Street, Fitzroy Square

At the same Court, the following passed the first examination:—

Rogers, Charles F. H., West Meon, near Petersfield

### APPOINTMENTS.

DOWNES, James Badger, Esq., appointed Resident Surgeon to Christ's Hospital, New Zealand.

### BIRTH.

GIBSON. On September 28th, at Birtley, the wife of \*George Gibson, M.D., of a son.

### DEATHS.

CURRY. On September 29th, at East Rainton, Durham, aged 28, the wife of \*William Curry, Esq.

RICHARDSON. On October 5th, at 12, Hinde Street, aged 3 years, Kenneth Benjamin, second son of \*Benj. W. Richardson, M.D.

**PROFESSOR OWEN** is to deliver four lectures at the Birmingham Institute.

**THE LATE DR. VOGEL.** The British government has given £500 to the sister of the late Dr. Edward Vogel, who lost his life in Central Africa.

**THE CAMBRIDGE BOTANIC GARDEN.** The Curatorship of the Botanic Garden at Cambridge is now vacant. The pecuniary emoluments are supposed to be somewhere about £120 a year.

**DR. BRADY, M.P.** Owing to the death of Mr. Henry Rayner, of the Isle of Ely, the daughters of Dr. Brady, M.P. for Leitrim, have inherited a fortune of upwards of £1,000,000.

**PAY OF DOCTORS IN TURIN.** The *Medical Gazette* of Sardinia states that, of the two hundred doctors at Turin, there are not a hundred and twenty who gain 17 francs a day!

**SKILFUL SURGERY.** The surgery of this (the Federal) army is reaching an extraordinary high scale as weapons reach perfection. Men wounded in the head or neck are fed for weeks through silver or rubber tubes. Such is the progress made by the medical department in these parts that half a man's face demolished by a ball or piece of shell is replaced by a cork face. (*Springfield Republican*.)

**UNIVERSITY OF CAMBRIDGE.** Dr. Humphry's lectures on Human Anatomy and Physiology will commence on Friday, October 14th, at one o'clock, and be continued daily.

**ACTION FOR MEDICAL FEES BY A NON-REGISTERED HOMOEOPATH.** Lately, in the Westminster County Court, one Scheibler sued one Harding for medicine and medical attendance; but Scheibler was not registered, and therefore the judge decided that he could not recover. The plea put in by his counsel was, that Scheibler was in the homoeopathical line, and therefore did not consider it necessary to register.

**CAMBRIDGE EXHIBITIONS.** There will be an examination at Sidney Sussex College on Tuesday, Oct. 11, of students who intend to commence residence; when, provided fit candidates present themselves, the following scholarships will be filled up: One for classics and mathematics combined, £80; one for classics only, £40; two for mathematics only, £40; two for natural science or mathematics, £40; one or more Johnson exhibitions, £32. The subjects of examination are, classics, mathematics, and natural science, including electricity, chemistry, geology, and anatomy.

**YELLOW FEVER AT BERMUDA.** The *Montreal Gazette* says:—"We regret to learn that seven of the military surgeons who recently left the North American Provinces for Bermuda were at last accounts sick with the yellow fever. Drs. Ewell and Mellery are dead, and Dr. Lloyd not expected to recover." The *Montreal Herald* of the 17th says:—"Captain Lockhart of the Royal Engineers was also dead of the fever; and several officers of the Queen's Royals, Dr. Harrison, of the Royal Artillery, and others, have also fallen victims to the disease."

**ACTION FOR MEDICAL FEE.** Bath County Court. *Parker v. Fisher.* This was an action brought by Mr. Parker against Mr. Fisher, to recover £15:15 for medical attendance upon the defendant's wife. It was contended for the defence that, in consequence of the defendant having volunteered his services (which were admitted to have been rendered) he undertook the matter gratuitously; and that the account was excessive, the plaintiff having attended more frequently than was necessary. In support of this latter view Mr. Spender and Mr. Gore were called for the defendant. The jury found a verdict for the plaintiff for £1:4. (*Bath Journal*.)

**HIPPOPHAGIC BANQUET.** The following is the invitation issued to the members of the Congress at Lyons:—"The use of horse-flesh for food is an immense benefit to health and public fortune. Adopting it in France, we should introduce 40,000,000 kilos of flesh—as good as beef—more succulent than pork, and a third of the price of other butcher's meat. But is the taste of horse agreeable? The Hippophagi say: 'Yes'; their adversaries 'No' because they have not yet acquired the taste. MM. the members of the Congress are earnestly requested to give the experience of their tried palates, in order to do away with this prejudice, and to favour us with their company at this great hippophagic demonstration. The banquet will take place at the restaurant 'Neyret.' A menu of twelve dishes will be prepared for the guests. There are only 120 tickets. Dr. MUNARET QUIVOGUE, Veterinary Surgeon, Promoter of the Festival."

**THE LATE PROFESSOR QUEKETT.** A handsome polished granite tomb, with ornamental railings, has recently been erected to the memory of Professor Quekett within the churchyard of Pangbourn, in Berkshire, where he died in 1861, while residing there for the benefit of his health. The following in-

scription encircles the tomb:—"In memory of John Thomas Quekett, F.R.S., P.L.S., M.R.C.S.E., etc., Professor of Histology, and Conservator of the Hunterian Museum of the Royal College of Surgeons of England. Born at Langport, Somerset, 11th August, 1815; died at Pangbourn, 20th August, 1861, aged 46 years. 'There is a spirit in man, and the inspiration of the Almighty giveth them understanding.' His memory will for ever be cherished by all who knew him, and by the thousands who have profited by his wonderful stores of science."

**HONEY AS AN EXCIPIENT FOR PILLS.** M. Thibault (*Bulletin de Therapeutique*) believes that much of the disappointment following the employment of pills arises from their, as ordinarily prepared, acquiring a degree of induration that prevents their solution, and enables them to traverse the alimentary canal unchanged. To prevent this he recommends the employment of honey; pills prepared with it always remaining soft, however long they might be kept.

**LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.** The annual distribution of prizes to the pupils of the above institution took place on the 3rd inst. Dr. Long delivered the introductory address. Prizes in the following classes were then delivered to the successful students:—*Surgery*: Mr. Warburton, medal. *Medicine*: Mr. H. G. Samuels, medal; Mr. H. F. Fisher, certificate. *Junior Anatomy*: Mr. D. Evans, medal; Mr. L. V. Mapei, certificate. *Chemistry*: Mr. R. Hughes, medal; Mr. R. A. Mowll, certificate. Mr. H. F. Fisher, certificate. *Materia Medica*: Mr. H. F. Fisher, certificate. *Midwifery, etc.*: Mr. J. E. Burton, medal. *Practical Chemistry*: Mr. H. F. Fisher, books. *Medical Jurisprudence*: Mr. H. F. Fisher, books.

**A HERBALIST'S PATHOLOGY.** At a late inquest on a child which had been treated by a herbalist, and prescribed for by Dr. Coffin, it came out that Dr. Coffin had sent a certificate by post to the effect that the child had died of phthisis. Mr. Gant, who made a *post mortem* examination, stated that the lungs and other organs were quite healthy. Thereupon the jury returned the following verdict:—"That the deceased died from exhaustion from diarrhoea from natural causes; and the jury are of opinion that the legislature ought to put a stop to the practice of unqualified practitioners giving certificates, as it was calculated to facilitate child murder and irregularities of registration."

**MR. SYME'S CLINICAL METHOD.** Mr. Syme thus describes his mode of instruction: "The plan, therefore, which I introduced into the Edinburgh school thirty-five years ago, and still pursue, is to bring the cases, one by one, into a room where the students are comfortably seated, and if the patients have not been seen previously by the surgeon, so much the better; then ascertain the seat and nature of their complaints, and point out the distinctive characters. Having done this, so that every one present knows distinctly the case under consideration, the teacher, either in the presence or absence of the patient, according to circumstances, proceeds to explain the principles of treatment, with his reasons for choosing the method preferred; and, lastly, does what is requisite in the presence of his pupils. The great advantage of this system is, that it makes an impression at the same time on the eye and ear, which is known from experience to be more indelible than any other, and thus conveys instruction of the most lasting character. Every season I have from a dozen to twenty of my old pupils, who, having been employed for many years in the public service, and not unfrequently attained the highest rank, yet attend the whole course

without missing a lecture, and often bring to my recollection cases seen or remarks heard long before the bulk of the class were born. I may add, that the Edinburgh College of Surgeons, in their curriculum of study, have wisely taken a second course of clinical surgery instead of a second systematic course at option of the student; so that, instead of hearing the same story told over again, not always in the most lively manner, he may read his books and store his mind with valuable facts for future guidance and practice."

**VACCINATION.** The report of the medical officer of the Privy Council furnishes reliable data on the subject of vaccination. The inquiries made into the progress of vaccination are very partial, arising from the circumstance that the only returns which can be relied upon are those made to the registrars and to the Poor-Law Board. Dr. Seaton stated "that as a rule returns of successful vaccination are not made by private medical practitioners"; and that the "certificates of vaccination were rarely sent by any medical man who was not a contractor, and often neglected by those who held contracts." Dr. Buchanan's testimony is to the same effect. Dr. Stevens, in his report, shows: that one registrar had not kept his registry of vaccination since 1854, another since 1855, another since 1857, and three since 1859. From this it is evident that a complete return of successful vaccination is not made, and that, therefore, the inquiries carried on by the medical inspectors could only give the result of vaccination tabulated in the different unions. It is desirable that the inspectors should, in addition, examine the children in the schools. From these two sources—the tabulated union returns and the returns of the inspectors with reference to the children in schools—we can form a very fair estimate as to the progress of vaccination. The returns, taken from the reports, show that the Act of Parliament has failed entirely in procuring vaccination returns from private medical practitioners, and that, while all praise is due to the authorities in certain districts, such as Eton, for their diligence, in others it is impossible to speak too severely. We, therefore, are compelled to consider the Compulsory Vaccination Act, as it at present stands, very imperfect. It fails to secure the general return of vaccination certificates. The Boards of Guardians do not perform their duty with reference to the promotion of vaccination, and taking proceedings against those who fail to comply with the Act. The remuneration to the union medical officers is generally fixed at so low a scale as to make every case vaccinated almost a dead loss to the doctor. A suggestion is made that, instead of medical men being required to give two certificates, one to the parents and the other to the registrar, there should be delivered to every medical practitioner a quarterly form for him to fill up of persons vaccinated, and that he should be paid for his return nearly in the same manner as clergymen are paid for their marriage returns; and that if they—i.e., the doctors—failed to make their returns within a limited time proceedings should be taken against them before the magistrates. It must be conceded by everyone that to enjoin upon a union medical officer to vaccinate a child within a radius of two miles for 1s. 6d., to visit it again on the eighth day, then to have to fill up four distinct forms, and to be paid only for the successful cases is more than ought to be required of any one. Two returns, one to the Board of Guardians and one to the registrar, might be held to be sufficient; and if the payment were fixed at 2s. 6d. within two miles, and 3s. 6d. beyond, would any one say that the parish would be a loser?



# Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### LINCOLN COUNTY HOSPITAL.

CASES OF FEMORAL ANEURISM.

Reported by C. HARRISON, M.D., House-Surgeon.

**CASE I. Femoral Aneurism: Compression: Ligature of the External Iliac Artery: Superficial Gangrene of the Foot, and Suppuration of the Sac: Death by Hemorrhage from the Sac on the Seventeenth Day after the Separation of the Ligature.** (Under the care of Septimus Lowe, Esq.) Samuel P., aged 28, a thin, cadaverous-looking man, labourer in a cake-mill, was admitted August 20th, 1863. He stated that, seven years previously, he had an attack of continued fever, since which he had not been so strong and active as before. He had noticed for the last six or seven years a small swelling on his left groin; but, as it caused him neither pain nor inconvenience, he took no notice of it. About six weeks before admission, he was wheeling a barrowload of cake; the cake slipped, and struck him in the groin. After this, he had pain on the upper part of the thigh, and soon noticed a tumour, which slowly increased in size and throbbled slightly.

On examination, there was found an oval tumour of about the size of a hen's egg, situated in the upper part of Scarpa's triangle, over the region of the left femoral artery, pulsating synchronously with the radial artery. Steady firm pressure caused the tumour to disappear; but, the pressure being removed, the tumour regained its former size. Pressure on the iliac artery stopped the pulsation, and caused the tumour to diminish in size (he was a thin man, and the external iliac could be pressed with facility and with little pain to the patient). The heart's action was feeble. There was no swelling in the region of any other artery. He had not much pain in the tumour; there was no œdema; and the sensation of the leg was not impaired. The stethoscope detected no bruit.

It being considered a favourable case for the application of pressure, on August 27th, a Signoroni's tourniquet was applied, and the external iliac compressed, so as nearly to arrest the flow of blood through the aneurism. The instrument was kept on, and the amount of blood allowed to pass through the aneurism was varied, the flow being sometimes nearly arrested altogether. He bore this very well for two or three days, and the aneurism seemed to become smaller and firmer; but, in consequence of the pain and inconvenience he began to experience from the pressure, he became restless and irritable, and would unscrew the instrument and remove it altogether. The consequence was, that the aneurism increased in size considerably; a bruit could be distinctly heard; and the tumour became conical in form, and inflamed on its surface.

Under these circumstances, on September 14th, chloroform having been administered, Mr. Lowe ligatured the external iliac artery in the method adopted by Sir A. Cooper. No blood was lost; and the operation was quickly performed. He was placed in bed, the limb being enveloped in cotton-wool and flannel bandages.

In the evening, the bladder was relieved by the catheter. He had no pain; the foot was warm; he had

feeling on the dorsum of the foot, but not in the toes.

Sept. 18th. The tumour was smaller; the foot was warm; there was no œdema of the leg. Tongue clean. Pulse 84. He had a slight discharge from the wound; and a slight erysipelatous blush on the tumour, noticed the previous day, had disappeared. He was ordered eight ounces of port-wine.

Sept. 22nd. There had been for two days great discharge from the wound; pressure on the right side of the abdomen caused healthy pus to pour out of the wound on the left side. He began to feel very weak; and was ordered ammonia and cinchona, with sixteen ounces of wine, four ounces of brandy, and two pints of beef-tea.

Sept. 25th. There was less discharge. The great toe was discoloured; he had no feeling in the toes.

Sept. 29th. Discoloration was extending from the great toe to the anterior part of the sole of the foot. During the night, he had pain in the tumour; but now was quite easy. The shape of the tumour was considerably altered; the swelling was more diffused.

Sept. 30th. The swelling was larger, with a blush over its surface, and fluctuation.

Oct. 1st. The swelling was greater; the erysipelatous blush was extending. The skin over the tumour was very thin. An incision was made; and, a few ounces of very dark fluid blood having escaped, the wound was plugged with lint.

Oct. 4th. This morning, the incision was extended; and, after a few ounces of fluid blood had escaped, a quantity of pus followed. The gangrene was not extending.

Oct. 5th. This morning (the twenty-second day), the ligature came away.

Oct. 8th. The tumour had discharged freely, and was greatly reduced in size. Both wounds looked well. The patient's health was greatly improved; he took daily sixteen ounces of wine, four ounces of brandy, two pints of beef-tea, a mutton-chop, eggs, and arrow-root *ad libitum*.

Oct. 15th. The wound made for the ligature had healed; and the cavity of aneurism was filling up. The little toe was discoloured. After this date, he slept well, and ate well; the secretions were quite natural; and everything seemed to promise a speedy recovery; but at ten minutes past one on the morning of October 21st (the seventeenth day after the separation of the ligature), I was summoned by the nurse, and found the man lying in a pool of blood. His countenance was blanched; his eyes closed; his skin cold; and he was pulseless. The wound was immediately plugged and covered with a pad, and a consultation called; but he was too far gone to admit of any surgical interference, and died at half-past five.

It may be worth while to mention that, at eleven o'clock at night, I was startled by three loud reports. Thinking that it might be an explosion of gas somewhere, I went round the house; but, on sending out to ascertain the cause, I found that a drunken farmer, going home from the races, had fired off three barrels of a revolver close to the back-gates of the hospital. The nurse who was with the patient said he was sleeping soundly, and at the second report awoke suddenly, and jerked up his leg. At the time, it was thought that the sudden jerking up of the leg had caused the clot in the lower end of the artery to be dislodged; but at the *post mortem* examination made the next day, this was found not to be the case. The lower end of the artery was filled by a firm clot down to the origin of a small muscular branch. The prothrombin was given on much higher than usual, and took its origin from immediately above the aneurism, and in it no clot was formed. The external iliac was four

inches in length; and the ligature had been applied two inches from its origin. Above the ligature, a firm clot extended to the bifurcation of the common iliac; below it, was a firm clot of more than an inch in length.

CASE II. *Femoral Aneurism treated by Opening the Sac and Tying the Artery above and below.* (Under the care of E. F. Broadbent, Esq.) James H., aged 33, was admitted January 31st, 1864. He was a miller by trade, of dissolute habits formerly, but had been steady during the last two years. In October 1862, he was digging some hard ground (he was in the habit of striking the spade with his foot): on one occasion, he missed the spade, and his heel struck the ground forcibly. This caused him pain in the thigh and numbness of the limb. A week afterwards, he felt a small lump, of about the size of a horse-bean, nearly in the middle of the thigh, and to the inner side. This increased very little until August 1863, when he worked in the harvest field harder than usual, causing the swelling to increase rapidly; and now he also felt a throbbing in it. The leg began to swell, and the sensation became diminished. He was under medical treatment, but gradually became worse, and was admitted the first time on January 11th. There was a pulsating tumour in the middle of the left thigh, of about the size of a man's fist, with a well defined margin and very distinct *bruit*. He had, however, not been in the hospital above half an hour before he left, and went home, some twenty miles, into the country. On the night of January 27th (the tumour having been gradually increasing in size, and having become more painful since he left the hospital), he had an attack of diarrhoea, and had to get out of bed several times. During the day also he had, whilst drawing a cork, struck his hand on the tumour. On the following morning, he found the tumour much increased in size. On the 29th, he had several rigors. On the 30th, the integument over the tumour became inflamed; the rigors continued; and on the 31st he was brought again to the hospital.

On examination, the limb presented a very different appearance from that which it had when he left the hospital about three weeks before. The whole limb was much swollen; the tumour had no defined margin, but was diffused, extending into the upper third of the thigh. The integument of the middle of the thigh was of livid colour; the leg was cedematous; and sensation was much impaired. The circumference of the limb at three inches above the knee was two inches more, and at eight inches above the knee five inches more, than on the opposite limb. He had a rigor on the road to the hospital. He had great pain; had not slept for several nights. His countenance was extremely anxious; pulse feeble and quick.

For two or three days the man refused to submit to any operation with the knife, as he had been told in the country he could be cured by pressure (but pressure he could not bear). He at last consented to any operation that might be decided upon. On February 3rd, a consultation was held; and, chloroform having been administered, the sac was laid freely open by an incision about ten inches in length over the middle of the tumour, commenced above and carried below it. This was immediately followed by a gush of blood. The contents of the sac were turned out; and the cavity, when exposed, was large enough to contain the head of a full-grown foetus. The upper end of the artery was easily secured; its orifice was very wide and patulous, so that the ligature was placed about an inch above. There was considerable difficulty in securing the lower end, in consequence of its being just at the point where the artery enters

Hunter's canal. After several ineffectual attempts to secure the vessel (during which a great quantity of blood was lost), a strong ligature was passed under the canal, and the tendinous structures and the artery tied together *en masse*. This controlled the hemorrhage. Several small vessels were ligatured; and some very large veins were troublesome; but all bleeding was eventually arrested. The edges of the wound were brought together with long wide straps of plaister; wire sutures were introduced; and the limb was bandaged from the toes upwards.

In the evening, he vomited frequently. Pulse very feeble. He was ordered iced brandy and an opiate.

Feb. 4th. There was slight oozing through the bandage. He had no sleep; had hiccup and sickness. Pulse 135. He was ordered two grains of opium.

Feb. 5th. He slept well during the night. The sickness had abated. No hiccup. Pulse 108; skin hot and dry. He was ordered to have an effervescing mixture.

Feb. 7th. The bandages becoming rather offensive, chlorine lotion was applied; and two ounces of brandy were ordered.

Feb. 8th. The wound was dressed, and discharged a quantity of disintegrated blood and healthy pus. The foot was warm; sensation was perfect. The cedema was much the same as before the operation. He was ordered beef-tea and six ounces of wine.

Feb. 11th. When the wound was dressed to-day, a large piece of the sac came away.

Feb. 14th. The ligature came away from the upper end of the artery.

Feb. 20th. The ligature came away from the lower end. After this date, with the exception of a rather sharp attack of dysentery, he progressed favourably. On March 7th, he could walk about the ward with a crutch; and on March 21st, he went home, and walked with a stick.

## HULL GENERAL INFIRMARY.

### TWO CASES OF OVARIAN DISEASE.

Under the care of KELBURNE KING, M.D.

[Reported by MR. T. M. EVANS, H-ase-Surgeon.]

CASE I. Elizabeth Harris, aged 60, was admitted on April 2, 1864. She was in very fair health. The abdomen was much enlarged; the girth at the umbilicus being fifty-four inches. The right side was the most prominent. The superficial veins were enlarged. Percussion was dull; fluctuation distinct.

*History.* She was a married woman, and the mother of three children, all living. Ten years ago, she first noticed some swelling of the abdomen, menstruation being at that time rather excessive; after two years, she was tapped, and a quart of dark-coloured fluid was removed. The operation was repeated three times during the following two years; and again six years ago, when tincture of iodine was injected after the removal of the fluid. Much pain followed this operation; but she was only confined to bed for a few days. Since that time, she has been twice tapped; it being now three years since the last operation.

April 20th. Being in good health, she was removed to a small ward heated to 70°, and placed under chloroform. An incision, eight inches long, having been made, the omentum was found to be extensively adherent to the front of the tumour; these adhesions were broken down, and several large sacs came into view. Six of these, each of which held nearly a quart of fluid, were tapped; and were then found to be connected together, and to form, with a



large number of smaller sacs, one mass, attached in the pelvis by a single pedicle about an inch thick. This was divided, and secured by a clamp with a ligature beneath it; and the sides of the wound were brought together with sutures. The intestines were scarcely seen, and little or no fluid escaped into the peritoneum. The contents of the cysts varied from a straw-coloured, thin, but viscid, fluid, to one of a brown colour and gluey consistence; and some of the fluid sparkled with scales of cholesterine, which exhibited very perfect plates under the microscope. The whole mass, tumour and fluid, weighed two stone.

After the operation, she suffered great pain; but was much relieved by a drachm of tincture of opium; in the evening, fifteen-minim doses were repeated every four hours. Barley-water and tea were also taken, though several times rejected by vomiting; for which soda-water was given.

April 22nd. The patient passed a quiet night. Pulse 93; tongue moist. She had no further sickness; but a rather frequent cough, and an anxious expression. The catheter was passed night and morning. The opiates were continued. At 4 P.M., she was perspiring freely.

April 23rd. She vomited several times in the night; pulse 120; free perspiration; abdomen painful. 6 P.M. She was in great pain; the pulse was failing; the extremities were rather cold; the abdomen was very tympanitic. An assafetida enema was given; and six ounces of brandy were ordered. She died at 11 P.M.

**SECTIO CADAVERIS.** The stomach and intestines were much distended with flatus; and there was about a quart of bloody serum in the peritoneal cavity. The small intestines were deeply injected; and their folds were agglutinated by recent lymph. The pedicle was quite free from any signs of inflammation. The uterus and left ovary were healthy. There was no other disease.

**CASE II.** Elizabeth Cherry, aged 39, was admitted into the Infirmary three months ago, for swelling of the legs, when two tumours were found in the abdomen, one on each side, firm, but distinctly elastic, of which she herself was before unconscious. Her health, at that time, was not much affected, though she suffered from occasional pains in the abdomen; and, being unwilling to undergo any operation, she was discharged. After leaving, she became rapidly worse, the abdomen also increasing in size; and three weeks before her last admission, she was tapped on the left side, when three pints of brownish viscid fluid were evacuated. She was unmarried; menstruation ceased six months ago, having been imperfect for a year previously.

June 7th. She was re-admitted, in a very low and emaciated state. Pulse 104, feeble; tongue dry and irritable. The abdomen was much swollen and tense, and its superficial veins were enlarged. It was dull on percussion, except at the upper part; and on the left side, a firm, but distinctly fluctuating tumour, could be felt on pressure. Both legs were slightly cedematous. She was ordered to have fifteen minims of tincture of opium, with the same quantity of chloric ether, every four hours; and to have milk-diet and ten ounces of brandy.

June 9th. She was frequently sick, and much weaker; she could not lie down in the bed. Soda-water was ordered.

June 11th. She was wasting rapidly; took little nourishment, and was almost constantly sick. Ten grains of bicarbonate of potash were added to the draught. The sickness afterwards abated; but she sank and died on the 16th.

**SECTIO CADAVERIS.** The lungs and heart were healthy. The omentum and intestines were greatly

thickened all over by a white cancerous deposit. On the left side of the pelvis, there was slight local peritonitis over a tumour of about the size of a cocoon; and, on separating the adhesions, the mark of former tapping was visible. The tumour was so adherent, that it was impossible to remove it entire; and, it being torn, a viscid, reddish fluid escaped. The tumour consisted of a sac containing fluid, with a solid mass of cancer at the lower part, adherent everywhere in the pelvis, and growing freely and sprouting out, as it were, into the interior of the sac. The solid portion had in parts the appearance of soft cancer; and, in others, contained abundance of cheesy, yellow, semifluid substance, of a colloid character. The right ovary presented similar disease, but less advanced; consisting of a sac of fluid, into the lower part of which sprouted a cancerous mass, which was adherent in the pelvis, and had more of the medullary character than the other ovary.

**OBSERVATIONS.** The case of Elizabeth Harris appeared not an unfavourable one for operation, although she was advanced in age, and had been subjected to previousappings; for her general health was good at the time, and the disease quite free from any suspicion of malignancy. The size and number of the cysts made them rather formidable during the operation; but fortunately they were all attached by a single pedicle. She progressed favourably at first; but peritonitis set in, and quickly terminated the case.

The last case was somewhat suspicious from the beginning, on account of the oedema of the lower extremities, though not sufficiently so to forbid operative measures; but, on re-admission, her health was too seriously affected, and there was every probability of the disease being of a malignant character; so that, though she had requested to be operated on, and had come in for that purpose, it was considered inadvisable to accede to her wishes. After death, the tumours were found to be so extensively adherent, that, if any operation had been begun, it could not have been completed.

## Original Communications.

### FOREIGN SUBSTANCES WITHIN THE EYEBALL: THE SUBSTANCE OF A LECTURE.

By HAYNES WALTON, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

IN these accidents, I reiterate the principles propounded in my last paper respecting the removal of substances from the surface of the eye. It is our duty, whenever practicable, to remove whatever is driven into the eye. When the body has passed out of sight and cannot be very readily felt with a probe, or ascertained to be superficial, the eye must for a time be left to take its chance; as likewise when the body is so small that it is scarcely possible to seize it; or when it is of such a nature as to be likely to be absorbed; or when it is soft, and, though insoluble, cannot be taken out, as gunpowder, or its residue.

As I have mentioned the probe, I must also enjoin a little caution about its abuse. A great deal of harm is often done with it. I never employ it, except I have strong suspicion of the presence of some intruded thing, and always in a light and superficial manner, for every movement of it out of the line of the injured part inflicts damage. Under all circumstances, except in

very practised hands, the patient will have the benefit from dispensing with it.

It is into the anterior chamber of the eye that substances are mostly driven. We have now sufficient evidence that iron, or steel, provided that it be but a mere fragment, will become oxidised and absorbed in the anterior chamber, leaving the eye uninjured. So long as an oxidisable bit of metal, sufficiently small, does not produce symptoms, wait and see the issue. But this does not hold good with copper or brass. These resist the saline action of the aqueous fluid, and should be taken away; and the sooner the better.

There are several examples published, to show the tolerance the eye may exhibit with bodies in this place, for days, weeks, and even years; in one peculiar instance for sixteen years; but as a rule the end is disastrous. Except the very unlikely process of encysting should ensue, the eye will perish. It is not suppuration that usually destroys, but generally subacute inflammatory action; and sometimes the function of sight is lost, with scarcely recognisable objective symptoms.

The length of time that may have elapsed since a foreign body entered the eye, should be no reason against endeavouring to extract it, if its presence be injurious; because at any time, even after the interval of years, intolerance to it may be manifested. Experience and much inquiry have convinced me that, after symptoms of irritation have set in, it is a fallacy fraught with danger to wait till they cease, for an opportunity to operate. The subsidence for the most part never arrives till the eye is destroyed, and the most threatening symptoms will rapidly end when the irritant has been removed. Except then, under very exceptional conditions, we attempt first to subdue any very acute inflammatory action, there should be no delay. But it is no easy matter to do what is required with the least possible injury, and effectively. Attempt upon attempt is often made in vain, and a well tutored hand only can be expected to be successful. It is an undertaking above all others, that needs self-possession, knowledge of operations on the eyeball, and cleverness in manipulation. Chloroform is indispensable. Emergencies will arise, and must be expected, and should be provided for.

The process of encysting, of which I spoke in my last paper, as occasionally happening on the surface of the eye, is still more rare here, in the anterior chamber. Except for very cogent reasons, I should be disposed to leave an encysted body alone. I should not interfere so long as vision was not interrupted, or likely to be damaged by this conservative effort. But a substance so tied down, is not altogether, and for ever, out of reach of harm. Effusion of lymph, or a capsule around it, does not absolutely secure immunity from future disturbance. The cyst may be spontaneously opened, or be broken by violence, or become injurious in itself.

A foreign body may be impacted in the iris, and be apparent, and yet it might be prudent not to interfere. Except it project, and can readily be seized, the difficulty of extraction is very great, and the operation is likely to be injurious; therefore, in general, and in the absence of symptoms, and especially when it is very minute, I should be inclined to wait, as by so doing there is afforded an opportunity for encysting, which is so likely to happen in this position. I suspect that oftentimes, when an operation is imperative, the better plan would be to excise the bit of the iris, rather than what has so often proved a most tedious and fruitless process—that of picking out the fragment, particularly when more or less covered by exudation. Even on this part an encysted body may become loosened, and produce all possible

ill effects. In the *Dublin Quarterly Journal of Medical Science*, 1848, page 210, is recorded an instance of a very minute scale of copper-cap in the iris becoming encysted, and remaining so for eight years; during which time it produced repeated attacks of inflammation of the eyeball, and, ultimately, it exfoliated through the cornea.

When the posterior chamber of the eye has been entered, the same rule must, if possible, be followed. If the lens have lost its transparency, a better search may be made by removing it.

I have not seen anything impacted in the crystalline lens; and I find but few such accidents recorded. I suspect that opacity is the inevitable consequence. According to the position of the body, must it be decided whether it shall be better to attempt the removal of it in the first instance, and the opaque lens afterwards; or to take it away with the lens. Under all circumstances, the removal must be undertaken; for if even no immediate irritation be produced when the lens becomes absorbed, as it surely will, the offending body will fall into the posterior chamber of the eye, and act injuriously.

The records of ophthalmic surgery teach us that, even when the vitreous humour has been penetrated by a bit of metal it can be explored, and the metal removed, and the eye saved. A metallic chip was driven through the eyelid and the sclerótica, near to the cornea. Several days after the injury, and while the ophthalmoscope was being used, at a sudden turn of the eyeball, there started from behind the inner portion of the iris an oblong, black body, which was instantly recognised as a chip of metal. It was entangled in a few thread-like remains of clot, which kept it suspended in the vitreous humour, and allowed it to move freely backwards and forwards. After due deliberation, the operator determined to penetrate the vitreous humour from below, and endeavour to extract the body. Standing behind the patient, who was seated in a chair close by the window, the eyelids being separated with a spring retractor, he fixed the globe of the eye by nipping up a fold of conjunctiva just above the cornea. A Jäger's lance-knife was then thrust in a little distance from the margin of the cornea, and the point directed backwards, to avoid wounding the lens. The knife was now withdrawn, and Assalini's iris-forceps introduced, with which, after one or two unsuccessful attempts, the body was grasped and extracted. It proved to be a part of the edge of a chisel, about one-tenth of an inch long, and weighed a quarter of a grain. In a remark appended to the case, in the *Ophthalmic Hospital Reports*, it is truly said that in such cases there is a certain lucky chance, without which the most skilful manipulations may fail of success. I may add, that such a fortunate result can fall to the lot of but few operators, nor is a parallel case likely to occur. Still, in allied accidents, the circumstances should be studied with a view to similar treatment.

When there is any reason to suppose that the posterior part of the eye retains any extraneous material, and the symptoms are severe, the eyeball ought to be extirpated; for, irrespectively of the likely injurious direct effect of the accident, sympathetic implication of the other eye is imminent.

In the following case of gunshot injury, it was not at all clear whether a shot had entered the eyeball.

A farmer, with one only available eye, was unfortunate enough to be shot by a boy a few yards in front of him. The greater part of the charge went through his hat, but several shots lodged in his scalp, his forehead, and in the eyebrow, and he was blinded. The anterior chamber seemed occupied by blood. The eyeball was very hard and tender to touch. There was no evidence of shot having entered it, yet its



state could not otherwise be accounted for. Vision was quite destroyed. I was consulted by the recommendation of Mr. Marriott, of Kibworth, for the intense pain in the brow, frequently associated with pain in the orbit, and in the eye. Other surgeons had been consulted, and the conclusions arrived at were different from my own, which was to leave the eye alone, and to remove the shot. I extracted all that I could get at—that is, all that I could feel. Some were embedded in the bone. My patient being a very large and a remarkably fat man, they were the more concealed. Every wound healed by the first intention. Considerable relief followed; but pain in the old situations at longer intervals still tormented him; and some months later, when the position of a few more shots could be traced, I removed them with advantage. Once again he came to me, as two that yet annoyed him could be felt, and they were the last. There was no return of pain after I extracted them.

It is a great satisfaction to me that I avoided extirpating the eye, which would have been useless, and must have further spoiled a fine and benevolent countenance; for, notwithstanding the front of the eye is not quite natural, the pupil being closed and the iris discoloured, there is no marked disfigurement.

## Introductory Lectures.

### MIDDLESEX HOSPITAL.

THE Introductory Address was delivered by Dr. GREENHOW. He said that he should specially adapt his address to the young men who already were, or who were about to become, students of the Middlesex Medical College. He would remind these gentlemen that this day was the commencement of a new era to them all; it was the landmark of their past progress, the starting-point of their future course; and a few practical counsels, that might help to guide them on their course, and to assist their progress, were what he proposed to offer them during the remainder of the time at his disposal. With this purpose, he proposed to consider—1. The object with which they had entered themselves as students of the college; 2. The studies that would be necessary to secure this object; 3. The manner in which they could pursue these studies to the best advantage; 4. The spirit and aims with which they should pursue the calling for which these studies were to qualify them.

With regard to the first point, there could be no question that their object was to qualify themselves for the practice of medicine; and he trusted that their real object was to render themselves useful and competent members of the profession, and that none of them had in view either the partial object of studying merely some one branch of medical knowledge, or the degrading object, as he could not but consider it, of merely securing their diplomas. No excellence was to be attained in any one speciality, unless a broad and solid foundation of general medical knowledge were first laid. But far more strongly he must denounce the indifference to all branches of medical knowledge alike, which led some men to be satisfied with barely passing the examinations of the several boards, whose standard of proficiency was necessarily a low one; for deliberately to place one's self on a low level, and aim at a low standard, was, in his opinion, degrading to any man's self-respect.

He then enumerated the studies necessary to secure their object; and said they must never forget, in the wide and interesting fields of knowledge which these would open to them, that, as intending medical

practitioners, they must study every science with reference to its applicability to the purposes of medicine, including every branch of the healing art. They might master all these sciences perfectly, and even their practical applications to the purposes of medicine, without becoming competent medical practitioners; for medicine was an art, no less than painting or music, and required long practice to attain even moderate proficiency. But medicine differed from every other art, in that it was exercised upon living fellow-creatures, to whom bungling might prove fatal. The tyro in painting or music might spoil the materials or instruments of his art, and yet do no worse harm than that of offending the taste or the ears of his neighbours; but the tyro in medicine might destroy precious lives in his crude experiments upon human subjects, and must therefore be content to learn his art in the first instance by observing the practice of others, and only begin to practise it himself when he could do so with safety to his patients. From the day, therefore, that they entered the lecture-room as students, they should begin also to observe disease and its treatment in the hospital; and, although during the earlier period of their attendance the larger portion of their time should be devoted to the study of science, and during the latter period, on the contrary, to the study of practice, yet from first to last these studies should go on together. Before concluding the consideration of their necessary studies, he must say a few words on the education of their physical faculties. It was not merely by being shown the relation between certain visible signs and certain internal diseases, by being made to listen to the sounds in the chest which indicate certain forms of pulmonary or cardiac disease, or being told to feel the crepitus of a fracture, or the heaving expansive impulse of an aneurism, that they could educate their senses. Instruction came by precept; but education could come only by use.

With reference to the third point—viz., the manner in which they could pursue these studies to the best advantage—it would, perhaps, be more in accordance with custom, if he were to limit himself to general advice. But he had found that general counsels, however good, did not practically save medical students, especially first-year students, from wasting precious opportunities, for want of knowing what those opportunities were, or understanding their true value while the time for profiting by them remained; and he had found also that some students, even up to the conclusion of their attendance, lost the benefit to be derived from prosecuting their studies on a regular and connected plan, from sheer inability at first to form such a plan for themselves, and from drifting in consequence, during their earlier sessions, into indolent and desultory habits. He should, therefore, endeavour to lay before them the details of a scheme for the systematic employment of their time. Dr. Greenhow then explained the distribution of hours which he proposed to first year's students, in order to combine regular attendance on the prescribed courses of lectures on anatomy, physiology, and chemistry, with a diligent study of practical anatomy by dissection, and a share of attention to the study of disease and its treatment, chiefly in the medical and surgical out-patient rooms of the hospital. He was sure that a man of average diligence and ability might profitably attend all the prescribed lectures, and keep up with them in his reading, without being over-burdened with work. He strongly advised the devotion of a larger portion of time to the study of practical anatomy than was now usually given to it by medical students. He recommended that, during their first winter session, their study of disease and its treatment should be carried

on chiefly in the out-patient rooms, where the majority of cases closely resembled those they would be called on to treat as young practitioners, and also admitted of being more thoroughly examined by the student, without detriment to the patient, than was possible with the cases of more advanced and acute illness generally found in the wards. He further advised that they should, as a rule, devote at least three hours every evening, except Saturdays and of course Sundays, to reading at home strictly in connexion with the lectures and work of the day. He afterwards sketched out more briefly plans for the employment of the student's time during subsequent sessions; and concluded by observing that he had now gone through their three years' course of study; and that, as they had seen, each year, nay, each day, had its proper work, which could not be postponed to the next. There was no time to spare; but there was sufficient time for everything, if everything were done at the right time; and it was certain that nothing less than everything there prescribed would suffice to qualify them for the arduous duties of their profession.

Regarding the last point for consideration—viz., the spirit and aims with which they should pursue the calling for which these studies were to qualify them—he said that, in whatever line of life a man's lot might be cast, his duties were to himself, to his neighbours, and to God, and should, therefore, be performed in the spirit of self-respect, of charity towards his fellow-men, and of faith and obedience towards his Maker. There were trials and difficulties peculiar to the medical profession; and, unless they were met with the preparation of a right spirit, they might easily lead its members astray from the right aims of life. It had been truly said, that most men regard themselves too much, and respect themselves too little; and in no profession was there so much danger as in theirs that too exclusive regard to self and selfish interests would lead them to derogations from the spirit of self-respect which must lower them in their own eyes and in those of their fellows. The medical man should also especially cultivate the spirit of charity towards his neighbours—charity, not only in the restricted sense of benevolent aid to the sick and suffering, which, it must be remembered, was in accordance with their professional instincts, and seldom in even apparent opposition to their professional instincts, but charity also in its wider sense of candour and good-will towards their professional brethren, which was a rarer and a higher virtue, and one which they should cultivate for the sake of the immunity it would secure them from the painful and mistaken jealousies which equally embittered failure and poisoned success. They might almost infer the aims they should pursue from what he had said of the spirit in which they should pursue them. The aim of professional success was a necessary and legitimate aim with all of them, and one to which he would wish to see them earnestly aspire; but still he must remind them that it should never be their highest or their sole aim. They should cultivate to the utmost, and employ with their utmost energies, all the faculties and skill they might possess, with the high and conscious aims of diminishing the sum of human suffering and increasing the sum of human enjoyment, and of thereby fulfilling God's purpose in the station of life to which He had been pleased to call them. Of medical knowledge, above all other knowledge, it might surely be said, that it should be, "not for profit or sale, but a rich storehouse for the glory of the Creator and the relief of man's estate."

## GUY'S HOSPITAL.

DR. J. BRAXTON HICKS, F.R.S., delivered the Introductory Address. He commenced by giving a hearty welcome to the students. He considered the first year the most important of all, for stamping the character of their manhood, for good, for evil, or for non-entity. He urged upon them the necessity of keeping up the character of the school; for to them, as its representatives, the world would look. He alluded to the flourishing state of the school, and the high position its students took at the examinations. He then dwelt upon the objects of the profession; its endeavour to mitigate human suffering; and its power of improving and ennobling the minds of its followers. Beyond the duty and high privilege of man to endeavour, as far as possible, to assimilate himself to the divine essence, the next end of man's life, as taught by the Great Master, was to alleviate suffering humanity; and this was the object of the medical profession. Other occupations, doubtless, held forth the promise of greater gain; nay, there were other professions which offer hopes of greater fortune and higher rank; but there was none which, while it enabled its followers to gain a competent living, would so much enable them to carry forward the great end for which they were created, and to further the designs of universal brotherhood.

He then called upon the students to acknowledge the responsibility and anxiety of a post having such noble ends in view as the profession of medicine; and appealed to them to take every advantage of the opportunities offered them, considering that upon their actions, right or wrong, the lives of others depended. Not that they were responsible for every life placed in their hands; but for the acquirement of as much knowledge as their time and abilities permitted.

Dr. Hicks then pointed out the division of medicine into principles, and their application. He was the most accomplished practitioner, who united these in their proper proportions. He advised the students to attend during the first two years to compassing the principles; taking, however, opportunities of seeing practice in the wards during that period. Chemistry, anatomy, and physiology; comparative anatomy and physiology; botany and physiological botany; would be studied in the first two years. They were, more or less, so thoroughly interwoven into the healing art, that they could be used at every moment, as aids in the interpretation of phenomena, in the explanation of facts, by close analogy, and in affording a broad insight into the bearing of circumstances. Some of these sciences were not all equally important to the healing art; but he (Dr. Hicks) was at a loss to say which was the most, and which was the least, valuable. Anatomy and physiology, perhaps, might rank highest, and botany the least. Yet animal physiology could not be understood without vegetable, or human without comparative. Having acquired a fair knowledge of these sciences, the students would then attend to the aberrations from the normal state, or disease; the mode which Nature herself undertakes to rectify these; and the means of assisting her. It was the part of modern medicine to study the natural progress of diseases; to note what kinds tended to recovery, and what forms to the destruction, of the patient; and what outward or inward causes influenced them. The study of the natural history of diseases was one of the most important he could recommend to notice. The study of pathology is as important at the bedside as its study in the dead-house. The greater proportion of diseases recover; therefore, we know but little of their post-mortem appearances. We must study them by their temporary effects upon the state of the body,



compared with that of health, which you will have learnt by your physiology.

In speaking of the study of the effects of remedies, the lecturer said that it would be the duty of his hearers to study them very closely, in order that they might not overlook their real action, nor attribute to them effects which really did not belong to them. It would require long and patient bedside study to become acquainted with the subject; and yet this was the end of their labours. He begged them not to consider that remedies meant solely drugs; but that they included everything which could be brought to bear against the adversary. He warned them, also, not to fall into the error of denying any efficacy to drugs.

He shewed that the task before them required a mind improved by habit to the full employment of its powers in close and careful observation, energy, and continuous application; and a strict love of truth and rigid accuracy. He advised them carefully to weigh well all the remarks of their instructors; at first, taking them on trust, and afterwards judging for themselves.

He congratulated the school on the reciprocal understanding existing between the students and the school; and expressed an earnest hope that their pleasant gentle relationship might long continue. He advised the students, when they found that the opinions of their instructors varied, they should not cast them aside in despair, but weigh them all. The truth might be found in their combination. To a certain extent, they would find sure foundations and definite clear rules. Afterwards, they would find it more uncertain; and this would require more caution in order to secure the right road.

Dr. Hicks recommended, as an important help, discussion on diagnosis amongst the students themselves, and also in public in the Pupils' Physical Society, which latter would give impetus to thought and practice in public speaking. He then called to their mind the necessity of cultivating the use of the hands on every possible occasion, pointing out the requirement for delicate touch. He advocated to this end the study of drawing and painting, and particularly practice in carpentry; the latter being of especial value to the surgeon. To be successful, and thoroughly so, we must collect sands from every shore. The difference between men is not so much dependant on their different mental capacities, as in the amount of general knowledge. He then adverted to the specialist; and he did not apply the term merely to the minute divisions of medicine, but to the greater division of surgery and medicine, which prevailed, when formerly physicians made a boast of their ignorance of surgery, and surgeons of their ignorance of medicine. All this tended to retard knowledge. Although it was impossible to do without the divisions into which practice has divided, there were in it many disadvantages to the student, who frequently was apt to consider, when the patient was warded, the diagnosis thereby already settled; and if the case proved ultimately to have been placed in the wrong division of the hospital, the interest in it too frequently flagged. He alluded to the great advantages of having all classes of cases in one hospital; and he begged them not to be specialists in their studies. Dr. Hicks warned them against the dangers they would be exposed to in their freedom from control; and then he continued: In the discharge of your duties, you will find many difficulties—and who does not?—and many dangers. The difficulties you will overcome by resolution to follow the right path; the dangers by that spirit of devotedness and Christian feeling which has always distinguished our profession; which has urged its followers to succour

the dying amid pestilence, amid showers of bullets, or on the sinking ship. Need I fear that you, devoted to so glorious a profession, will, with all these noble examples before you, shrink from its dangers or quail beneath its difficulties.

In commending to them the value of a kind manner, he said: To those of you who have been laid on a bed of sickness, I need not speak; you have experienced the effect of kind words and gentle actions. To you who, in the full enjoyment of health, know not the weakness of body nor depression of mind produced by sickness, I would say, be very careful lest, in haste or from thoughtlessness, you pain the mind while your skill is endeavouring to alleviate the sufferings of the body. Remember, in addition to this, there may be a mind ground down by care and want; or a heart pierced through by sorrow; add not another shaft, but speak gently and in kindness.

The students about to leave, he cautioned that their position depended mostly upon themselves; that, although the profession gave them a station amongst the best in the land, should their actions fall beneath the proper standard, the professional garb would not cover them; if it were to do so, it could only be by the lowering of that standard, which God forbid, and which could never occur while her sons were, in the main, true to her. He also inculcated strict professional behaviour to each other; and concluded by wishing them, not freedom from all cares and troubles, but energy, perseverance, and steady heroism, which would overcome them; self-reliance, which only a good knowledge of their profession could give them; and that good name, which an upright character would surely bring them.

## LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

MR. LONG delivered the Introductory Address. After an allusion to the retirement of Mr. Batty, a veteran practitioner and lecturer, Mr. Long said that it was more than the third of a century since he first entered the profession. During that comparatively short period, he had witnessed many changes. He had seen many epidemic delusions of the mind, as well as epidemic diseases of the body; and had witnessed strange revolutions in medical practice. He had seen the rise and declension of many "pathics", and as many "isms"—heroic treatment and expectant; alcoholism and nihilism—all no doubt at times and in certain cases useful, but none of universal application. This *nihilism* had arisen naturally out of that perversity which made men rush from one extreme to the opposite, or out of that infirmity which rendered them unable to strike the balance between two independent truths. Our forefathers put too much faith in drugs; and we, by way of compensation, get rid of one error by running into another. Though doubtless our ancestors erred by an over-officious and meddlesome line of practice, and acted as if their medicines possessed specific virtues (to which few could lay claim), and as if no natural body could go on without help, giving medicines whether they were wanted or not, still it was true that there were diseases and conditions in which the effect of drugs was active and beneficial; and when the enormous power possessed by medicines on the animal economy, especially on the nervous system, was seen, it would be wise not to sanction opinions which set at nought these instruments, and led the younger members of the profession to despise them, instead of seeking out for themselves a thorough knowledge of their virtues. As the body was afflicted with a vast variety of diseases, many of which at pre-

sent defied the best directed efforts of the medical art, who knew but that among the vast variety of plants existing on the surface of the earth, and by the researches of modern chemistry, some remedies might not be provided for diseases now considered incurable? Many such had been discovered already. Mr. Long would instance two only—Peruvian bark in intermittent diseases; and the remarkable effects produced on the pupil of the eye by the Calabar bean. An objection had been raised to the use of medicines, that they were “unnatural”; and some spoke of nature and art in the treatment of disease as if they were antagonistic. Man did not now live in a state of nature; and diseases, Mr. Long thought, might be considered quite as unnatural as medicines. It must be borne in mind that medical men were rather ministers to and interpreters of nature, than antagonists engaged, as it were, in a constant warfare with her. The prevailing fault, the lecturer thought, at present was, not the trusting overmuch in drugs, but being sceptical of their utility.

Mr. Long observed, that no distinction was recognised at the outset between medicine and surgery; but the practical application of science was made the ground for subdivision. Medicine and surgery might then be regarded in a twofold aspect—as regarded theory and practice, the principles and their application. Science embodied principles; art consisted in the application of those principles. The more perfect the science, the more simple would be the rules by which the artist would work; but, when principles were of high comprehensiveness, the practice of them required more operative skill and sagacious judgment. In medicine, no principles of any high degree of generality could be said to have been established; and no rules of practice, therefore, existed which could be applied without exception or qualification. The complexity of the conditions affecting the phenomena of disease rendered the knowledge to be acquired, before means could be employed in the cure of it, one of the most difficult objects to which the attention of the practitioner could be directed. Much had of late years been accomplished in scientific and practical surgery, especially in that direction termed “conservative”. A good summary of this progress had lately been brought before the profession by Professor Fergusson, in his lectures; and Mr. Long also hailed with pleasure a new edition of Paget’s *Surgical Pathology*. Great improvement of late years had taken place in medical education. The preliminary examination, before the student could enter the pale of the profession, was most judicious. The division of the examination into stages was advantageous; this new plan, without overtaking the energies of the student, enabled him to be better prepared upon all subjects than was possible under the former system. It was a question whether the age of 16 might not be too early for a youth to enter into a profession. The choice had to be made before the mental powers had time to develop themselves—when, in fact, they were in a transition state, and before the tastes had been fully displayed. If general education were prolonged until the eighteenth year, the mind and tastes would have a longer time and more opportunities for unfolding themselves. It was more than probable that a young man, previously well prepared in general knowledge, would commence the study of medicine at 18, 19, or even later, with the probability of much greater success, than he who was bound an apprentice at 16, and passed three or four years in the acquirement of desultory knowledge of its least important details. The law did not allow early marriages; and yet a youth of 16 might be compelled, or of his own free will or caprice might tie himself to what is to be his future

business, and as much as possible his pleasure. Taste, as well as intellect, should be consulted in the choice of a profession. Men obliged to devote their intellectual powers to occupations laborious and distasteful to themselves did not succeed; and this held good especially in medicine. A comparatively superficial practitioner, who showed that he liked his profession, would secure a large practice; whilst another, possessed of three times the amount of his professional acquirements, and having, perhaps, greater intellectual pleasure in the pursuit of it, yet whose tastes were offended at its details, would remain, so far as the public are concerned, in neglect and obscurity. It had been well observed, “*La médecine est la plus noble des professions, et le plus triste des métiers.*” A systematic curriculum of study should be pursued, its chief advantage being rather to point out the path to the student than to conduct him along it; and attendance upon lectures which were not demonstrative was chiefly valuable to the student as connecting the knowledge he might have acquired from other sources, and indicating to him the points in which he was most deficient. Examinations were most useful as summarising what had been given in the previous lectures, and as a test of the attention and proficiency of the pupil. To expect a perfect knowledge of the profession, medical, surgical, obstetrical, etc., is out of the question. *Non omnia possumus omnes*. Whilst uniformity of medical education was desirable, there could be no objection to a subdivision of medical practice into various departments. It was impossible for any individual to keep pace with the progress of knowledge in all the branches of medical science. It was universally allowed that “division of labour” was favourable to perfection in all art; and there was no reason why it should be otherwise in the practice of the healing art, provided always that a choice of a special department be not made until the principles of the science of medicine had been fully acquired. Mr. Long reminded the students that the qualities to obtain a fair knowledge of their profession, and to ensure success in it, were not at all extraordinary; they were common sense and perseverance. There must also be a spirit of self-reliance and self-help. Help from without was often enfeebling in its effects; help from within invigorated. There was an education not to be learned from books, or acquired by any amount of literary training; and all observation served to illustrate the lesson that man profited himself more by work and observation than by reading. The steam-engine itself was a monument of the power of self-help in man. The idea, promulgated by Hero of Alexandria, was never lost, but, like the grain of wheat entombed with the Egyptian mummy, it sprouted and grew vigorously when brought into the full light of modern science. Grouped around it were Savary, the Cornish miner; Newcomen, the Dartmouth blacksmith; Cawley, the glazier; Potter, the engine-boy; Smeaton, the engineer; and, towering above all, the laborious, patient, untiring James Watt, the mathematical instrument-maker. The greatest results in life were usually attained by simple means, and the exercise of ordinary qualities. Progress of the best kind was comparatively slow; great results could not be achieved at once; and we must be satisfied to advance in life as we learn to walk, step by step. We must sow before we can reap, and often have to wait a long time content; meanwhile to look patiently in hope—the best fruit often ripening the slowest. There is an Eastern proverb worth remembering: “Time and patience change the mulberry-leaf to satin.” In conclusion, the speaker gave some excellent practical advice to the students, not only as to their professional course, but also as to their general conduct.



## ROYAL FREE HOSPITAL.

MR. F. J. GANT, F.R.C.S., delivered the introductory lecture, choosing as his subject, the Pathological Practice of Surgery. He said that, if he were asked what is the most professionally important study in which the medical student and practitioner can be engaged, he should not select anatomy; for its guidance is limited, and of far less value than advocated in the schools. Primed with descriptive anatomical knowledge, regional and systemic, the student commences practice; but, year after year, he mistrusts such knowledge, then ignores and necessarily forgets it, until his view of descriptive anatomy subsides into that of the prominent aspects of structure with the more obvious relations of parts, and as presented in the living body. But this restriction does not extend to organic and histological, or textural anatomy, the minute knowledge of both of which is all-important to the earliest and most exact diagnosis in very many cases. Physiology, like anatomy, over-taught in schools of medicine, is also far more an artificial creation, far less itself a reality. Physiology, human, so-called, yet chiefly the results of experiments on the lower animals, and so far inferential only, is proportionately unqualified to illumine the pathway of medicine and surgery. By mature clinical experience, the practitioner's physiology settles down to a clinical view of the functions of the different parts of the body and their mutual relations—a far more sound, and therefore more enduring, knowledge of the laws of human life than the deceptive depths of bygone years. This practical physiology, conjoined with practical anatomy, together represents man in health, structurally and functionally, in relation to the purposes of medicine and surgery; and by constant reference to this, as his standard of comparison, the practitioner habitually detects and estimates the beginnings of disease, or the disorganisation effected by injury.

Pathology is a science of wide extent and significance. It is the knowledge of disease (including injuries); and this represents: firstly, the alterations, structural, physical, and chemical, which, singly or collectively, the different solids and fluids of the body may respectively undergo, with the situation (if localised) and extent of such changes; secondly, the external causes of these alterations, and their own operation as (internal) causes of other alterations, contiguous to or remote from the original disease; thirdly, the course and tendency of the morbid condition, with, possibly, its subsequent complications, to or towards a favourable or an unfavourable issue. All this, observe, not to mention the analogous consideration of mental diseases, with their grand practical distinctions of irresponsible and responsible actions. I here restrict human pathology to its bodily significance. The first and part of the second of these aspects of disease are represented by pathological anatomy; the remainder, and the third aspect, exclusively, by pathology proper. Pathology proper is, therefore, our polar star in the practice of medicine and surgery.

To avail ourselves of the guidance of this knowledge, obviously it must become fore-knowledge—it must become prognostic.

Having argued the impossibility, in any case, of deducing this requisite knowledge from any other knowledge we may possess of anatomy or physiology, or from pathological anatomy, that it can only be gained by independent pathological experience—i.e., by special clinical observation—Mr. Gant proceeded to notice the ground-plan of an entirely new classification of injuries and diseases in accordance therewith. He said that, in his lectures, the various mor-

bid conditions to which the body is subject would be associated and arranged, by virtue of their pathological affinities. This aspect of pathology at once suggests the guiding and regulating principle of all therapeutics, both medical and operative. We thus discover the earliest occasion for interference with the order of Nature, if any be necessary, in some cases; the kind, and the least amount of such assistance, as may be needed from time to time to conduct the case to recovery. Clinical observation, having gone thus far, shows further, that the curative power of Nature is manifested more efficaciously at the commencement of injuries and diseases than at any subsequent period of their career, during which, indeed, complications arise, in most cases denoting its proportionate failure.

Guided, then, by the teaching of the earliest clinical observation as to the career of diseases, it follows that the earliest (and most exact) prognosis, or fore-knowledge thereof, is absolutely necessary to secure the most advantageous co-operation with the restorative power—i.e., before the supervention of any unfavourable condition, which, announcing that its curative efficacy is failing, would then probably frustrate the aid of remedial measures, whether medical, operative, or both, as the case may be. Should any complication have already arisen, or should any be present at the very commencement of a case, by similar prognosis or foreknowledge thereof we gain the opportunity for having recourse to adequate remedial measures before the supervention of worse complications. In the more rare cases, where the restorative power is itself alone sufficient from first to last, such foreknowledge of this self-sufficiency is still necessary, in order to withhold any interference which would, or might, divert the natural course of the morbid condition to recovery. We have at least an approach to non-interference suggested by the natural or normal course and tendency of certain fevers—*e. g.*, measles, scarlatina, and other eruptive fevers, all of which are apparently so many manifestations of the effort of Nature to eliminate various blood-poisons. In these and similar cases the purpose of rational medicine is fulfilled by interference only when some "complication" arises by which remedial assistance then becomes requisite "to avert the tendency to death."

Mr. Gant, after some further remarks, proceeded to comment on the term "conservative" surgery.

Mr. Fergusson, in his lectures this year before the Royal College of Surgeons, claims to have first introduced the term "conservative" into surgical nomenclature. But, at the same time, he has distinctly disavowed originality in relation to the principle of practice he thus designated. He has defined it as the preservation of the greatest portion of the body at the smallest possible sacrifice. Up to the present year Mr. Fergusson still adheres to this definition. He re-expressed it in his lectures; and it is still the prevalent view of conservative surgery. But such is the purpose and end in view of all true surgery, whether designated conservative or simply surgery. Then, again, conservative surgery, as hitherto understood, has reference only to operations. Advancing a step further in this direction, to obviate the necessity for any operative assistance—*e. g.*, the preservation of a joint without excision, is "conservative" surgery equivalent to "the medical treatment of surgical disease?"

This medical aspect of surgery, as a principle, goes no further, in effect, than that advanced on the part of operative surgery. It equally relapses into the obvious purposes of therapeutics—the preservation of the integrity of the body; if possible, by medicinal measures, rather than by any operation, however

little mutilation one may imply as compared with another operation. But while we admit the necessity and admire the wisdom of reforming the body politic to yet higher states of efficiency, the human body endowed with the power of growth, development, and restoration—is self-productive and self-protective; wherefore we need not interfere with its organization otherwise than so far only as our assistance is solicited by the shortcomings of its own operations and the failure of its own resources. The subjection and adaptation of all therapeutics—in time, kind, and degree—to the operation and requirements of this self-restorative power (of Nature) confer a truly conservative character on the practice alike of medicine and surgery; and, by ever referring us, as medical practitioners of whatever denomination, to clinical observation of the natural courses and tendencies of injuries and diseases, rule our art from the sure and commanding ground of pathology. To this end, diagnosis and etiological knowledge, each of the earliest and most exact character, are obviously subservient.

## Reviews and Notices.

CLINICAL OBSERVATIONS ON FUNCTIONAL NERVOUS DISORDERS. By C. HANDFIELD JONES, M.B., F.R.C.P., etc. Pp. 581. London: 1864.

THIS is a work of great value, both to the student of philosophical medicine who wishes to see physiology and pathology in close alliance, and to the practitioner who seeks for illustrative forms of disease, with sound indications for treatment, and a laudable effort at rational therapeutics.

The scope of the work is far more extensive than the title would have implied some years ago; when functional nervous disorders were very much restricted to neuralgia, and when every form of paralysis was ascribed to some organic central lesion. A few years hence, we may expect that a book with this title will comprehend a still more extensive domain of pathology; when other morbid agencies are viewed, as malaria and other miasms are in this work, as operating primarily on the nervous system, through which they affect other parts with Protean diversity of manifestation, functional and organic.

In no department of medicine of late years has light been so largely shed by experimental physiology as in that of the nervous system. Bell and Marshall Hall led the way; but the views of Claude Bernard on the sympathetic seem destined to lay the foundation of a new pathology. It is now some years since he showed that it was in the power of the physiologist to produce at will symptoms of disease and lesions of organs through their nerves—cough, dyspnoea, bronchial flux, pleurisy, and pericarditis, through the irritation of the pneumogastric; diarrhoea and dysentery from irritation of the solar plexus. His experiments have been confirmed and extended by others.

Our author, while admitting the probability that in all morbid action there must be some molecular change of cells and fibres, holds that, in the diseases of which he treats, the absence of organic lesion is proved, by the failure of careful scrutiny to detect any change, by the possibility of perfect recovery, and by the *juvantia* being such as modify the form rather than the texture of organs.

The points which, in his preface, he indicates as most worthy of attention, are—

“The recognition of primary paresis of the nervous centres, and its distinction from reflex paralysis; the numerous illustration of vaso-motor disorder; the theory of inhibitory action; the remarkable affinity between paralysis, spasm, anaesthesia, and neuralgia; the different quality of nervous disorder, apparently of the same kind, in different instances; the intimate relation of neuralgia in most instances to debility; and the importance of an accurate adjustment of remedies to each individual case.”

The work represents a mine of reading, as well as of original observations and reflections. The quality of the latter may be estimated by the following extracts.

“We ought not to think of diseases as uniform entities; but as very varying and inconstant pathological conditions.” (Pref., p. viii.)

“We are more and more convinced of the utter diversity and radical dissimilarity of many pathological states and symptoms, called by the same name, and always seeming much alike.” (P. 54.)

“The gross outward resemblance leads us to overlook and neglect the concealed, but more important differences. This is the more to be regretted, as the latter rule the treatment.” (P. 386.)

“The conception of a diathesis is a most important one, and must replace, to some extent, that of a poison, or *materies morbi*, which has been carried much too far.” (P. 525.)

“It is probable that, the more we come to know of disease, the more we shall find that there exist a few great distinct morbid causes, which, by acting on different parts, in varying combinations and degrees, give rise to ever varying modes of morbid action.” (P. 122.)

“The more our pathological knowledge increases, the more do we find that many different causes are capable of producing the same effects.” (P. 400.)

The chapter on General Pathology is well worthy of attentive study. It brings together the points of neuro-physiology and pathology which throw light on the subsequent special subjects. It will be found a most instructive compendium of our present state of knowledge.

Dr. JONES attributes the pathological phenomena of *Inhibition*, not to special fibres, as Pflüger, nor to energetic action of an afferent nerve, as Lister; but to an injurious impression on it, enfeebling it or the nervous centres to which it proceeds. As illustrations, he cites squint from whitlow, disappearing after the necrosed portion of the phalanx came away; amaurosis lasting thirteen months, with sight restored on extraction of a carious tooth, which had a splinter of wood projecting from one of its fangs; secretion of nasal mucus from plucking the vibrissæ at the orifice of the nostrils; amaurosis and ptosis from decayed or over-crowded teeth; facial paralysis from sudden cold; paralysis from cold and wet; pyrexia; etc. As a rule, the removal of the cause restores the function; while remedies directed to the paralysis are powerless.

He thinks it certain that malaria or influenzal miasm may paralyse a nervous centre more or less completely, without producing any organic change in it. Such paralysis he terms simple or neurolytic; it affects motion much more frequently than sensation.

The influence of the *Vaso-motor Nerves* on the cir-



ulation and heat is fully discussed, and admitted as an adequate explanation of numerous phenomena. Though the author admits, that other nerves have an influence in increasing the blood-flow through the tissues, he doubts the existence of special trophic nerves, apart from the ordinary motor and sensory nerves. In all his explanations, he employs action or paresis of the sympathetic to account for all vascular changes, to the total exclusion of any active nervous energy in determining heat and increased blood-flow; though he admits, in his general pathology,

"That we cannot doubt that certain nerves, when stimulated, do exert a very considerable influence in the districts to which they are distributed, in the way of increasing the blood circulating through the tissues. Herein they exactly antagonise the ordinary vaso-motor nerves accompanying the arteries, whose activity induces the opposite condition." (P. 23.)

This is the first and the last we hear of these active nerve-influences; and this omission strikes us as the weak point of the explanatory part of the work.

The *Febrile States* are mainly explained by paresis of the vaso-motor nerves. In the asthenic forms, Dr. Jones

"Assumes that the poisonous miasma has weakened the vaso-motor system and all the others. The increased temperature, the quick, soft, weak pulse, the hyperæmias of the viscera, are natural results (of the vaso-motor paresis). The increased secretion of urea from the augmented chemical changes in the blood, and from increased renal action, depends on the same cause; so, also, the hypertrophy of the solitary and agminated glands in typhoid are due to the same nervous paresis, and may be regarded as analogous to the enlarged spleen of ague, or the goitre of Swiss malaria. Then follow the cerebro-spinal symptoms."

In *Sibhenic Fever*, he assumes that the poison acts primarily on the sympathetic system only, while the heart remains vigorous and the pulse hard; the arterial coats, like the heart, retaining for a time excitability, while the increased temperature of the blood acts as a stimulus to both.

It seems to us that, when the miasm is confined to the sympathetic, the arteries should be influenced by it as early as any parts.

*Pyrexia*, or the Fever of Inflammation, is probably excited by a morbid impression conveyed from the part to the sympathetic centres, in consequence of which the vaso-motor nerves generally are enfeebled through reflex inhibitory action.

*Rigors* generally have three factors: 1. A morbid stimulus; 2. A hyperæsthetic sensory surface; 3. An excited or mobile condition of one or more nervous centres. In malarious and other fevers, pyæmia and suppurating foci may depend on the action of the poison on the spinal cord, throwing it into a state of undue excitability, whereby the muscles are kept in a state of clonic contraction, while the vaso-motor nerves maintain the organic muscles in a state of tonic (at the onset, we presume). Those of hectic, the author attributes to nervous exhaustion, with the centres in a state analogous to that in chorea; but manifesting itself in disordered actions of the vaso-motor, more than of the musculo-motor.

These views are suggestive and ingenious, though hardly adequate or conclusive.

*Neuralgia* contrasts strongly with Fever, and rarely exists with it. Malarial neuralgia often alternates

with fever; the sensory nerves being affected in the one case, the vaso-motor in the other, by the same cause.

Debility and prostration form the appropriate soil on which neuralgia grows. It is sometimes associated with numbness, especially in very sensitive parts, as in the fingers and hands; slight degrees of muscular paralysis are also occasionally associated with it, as an analogous affection of the motor nerves. The analogy is heightened by the fact, that the pain of a sensory and the paralysis of a motor nerve may both be removed by the interrupted current.

Besides debility or malaria, neuralgia may depend on remote irritation, or on the poisons of gout and syphilis.

Under the various important heads of *Cerebral Anæmia*, *Excitement*, and *Paresis*, will be found many valuable views on various diseases into which these conditions enter.

Unconsciousness and convulsion belong to anæmia, of which venous hyperæmia may be considered the equivalent in its influence on nutrition. Epilepsy, in both its forms, depends on anæmia. A cold state of forehead, with overpowering drowsiness, indicates cerebral anæmia; though the converse has many exceptions. The state of the eye and the urine will aid in the diagnosis; the latter being pale and copious in anæmia—scanty, dense, and lateritious, in hyperæmia. The pupil does not give reliable indications: as an excited brain or depressed cord will produce a contracted pupil, and *vice versa*.

Malaria, burns, and, in children, dental irritation, are great causes of cerebral hyperæmia. Dr. Jones confesses that in many cases we have no trustworthy guide in distinguishing sthenic from asthenic delirium, beyond that tact which is beyond the reach of rule. In the delirium of acute rheumatism, we must treat it as a substantive disorder by opium and stimulants; though theory might incline us to try to quell the irritation by thorough alkalinisation of the system. In all cases, in fact, the quality, not the cause of the delirium, must guide the treatment.

*Delirium Tremens*. In this disease, the author strongly objects to the expectant treatment. He distinguishes three forms: 1, inflammatory excitement; 2, nervous erethism; 3, asthenia. These require respectively: 1, tartar emetic, with or without opium; 2, sedatives; 3, stimulants.

*Chorea* is a paretic affection of the brain and cord, giving rise to undue mobility or convulsion, rather than to paralysis. Dr. Jones regards it as one of the most complete examples of the law, that irritability and mobility rise as power fails.

When the disease is simply paretic, tonics suffice for the cure. When the paresis is inhibitory from peripheral irritation, sulphuret of potassium baths cure by stimulating the cutaneous nerves, rousing the nervous centres to more healthy action.

*Spasmodic Affections* "seem rarer than hyperæsthesiæ. The same may be said of the kindred paralyses, as compared with anæsthesiæ and neuralgiæ. In organic disease, the case is reversed, and motor power suffers more frequently than sensory."

*Facial Neuralgia* may be of four kinds: Reflex; Cerebral; associated with tenderness; or Malarial.

Under the head of *Brachial Neuralgia*, the author says:

"The nocturnal aggravation of pain; its remission

or absence by day; the intimate relation between it and numbness, so that the latter seems to be a less degree of the same condition; the co-existence in some instances of motor-disorder; the prevalence of general debility; the absence of self-limitation; are family features of neuralgia."

*Angina Pectoris* he regards as essentially a neuralgia of the heart combined with spasm. He inclines to agree with Laennec that, in a slight degree, it is a very common affection. Cardiac neuroses, he divides into rheumatic, malarious, saturnine, and those connected with exophthalmic goitre. The present writer can fully endorse his views as to the dependence of cardiac neurosis on malaria, having for some years seen much of it, and pointed out its dependence on antecedent ague. Much of the invaliding for heart-affections in India is of this nature; though the functional nature of the symptoms is generally overlooked, and organic symptoms are freely ascribed.

Many slight neuroses of the heart, Dr. Jones thinks due to tea, acting on nervous centres or cardiac sensory nerves hyperæsthetic from debility.

"Many Alpine tourists find cold tea an excellent refresher in their mountain clamberings. It is plain enough that, to a tolerably firm nervous system, tea is a grateful and useful stimulant. Its poisonous and depressing action on the weak and shaky system may be explained on the production of hyperæsthesia by debility. When the nervous system has become enfeebled, the plexuses of the coronary arteries partake of the morbid sensibility, and are excited by tea to produce contraction of the vessels. The heart is thus imperfectly supplied with blood; and its action is consequently feeble and flagging. In other instances, where palpitation is produced, it is probable that the stimulus tells more upon the muscular tissue of the heart than on the coats of the vessels."

Under *Respiratory Neurosis*, *Pertussis* is the capital example of a specific bronchial hyperæsthesia.

Under *Laryngismus Stridulus*, the author remarks:

"The sudden death, which is by no means uncommon in this disease, depends, I conceive, on the transmission of irritation along the cardiac fibres of the vagi to the heart, which is thus arrested in its action."

*Asthma* is considered as a neurosis, attended with more or less of bronchitis, and causing spasm of the bronchial muscles, obstructing the access of air to the cells of the lungs, and thus diminishing the size of the chest, which is indicated by sinking of the epigastrium and elevation of the diaphragm.

As to *Cutaneous Neuroses*, Dr. Jones accepts Romberg's view, that in lichen, prurigo, urticaria, etc., the hyperæsthesia or dysæsthesia is the cause, not the effect, of the eruption. We had recently under our care a case of urticaria, coming on with each accession of tertian ague for three paroxysms. It is possible that the prurigo, which in scabies forms the major element of the eruption, may be the eccentric and reflex result of the original peripheral irritation. Herpes labialis is a frequent concomitant of ague. All these bear out this view.

*Malaroid Disease*. This is a very interesting chapter, which contains, in a very condensed form, the pith of malarial pathology, followed by illustrations of malaroid disease as occurring in or near London, in children and adults. It is unquestionable that, in many parts of the United Kingdom, malaroid affections are sufficiently prevalent to deserve

careful study and attention. As Dr. Jones truly remarks, they are not like our ordinary fevers, self-limiting, but tend to constant recurrences, unless arrested by suitable remedies. Those who are familiar with malarial affections in tropical countries are best qualified to appreciate their existence at home, and to distinguish them from other febrile states. With competent observers, the researches for forms of malarial disorder over the United Kingdom would be a most interesting medico-topographical investigation.

We have thus hurriedly glanced over the more salient subjects of special pathology treated of, but have omitted many more.

The indications for treatment and the adjustment of remedies form a conspicuous part of the work, under the several heads of disease, and are of great practical value. Dr. Jones has added a concluding chapter on Remedies, which merits high praise as an effort in the direction of "rational therapeutics".

Throughout his work, exposure to *fresh bracing air* is once and again recommended as a sovereign remedy in those neuroses which are attended with hyperæsthesia and excitability.

Quinine checks and arrests malarious fever by virtue of its toning influence on the cerebro-spinal and sympathetic system. It does not act by neutralising the malarious poison, as it may be given to any amount in visceral disease from this cause, without the least curative effect. The buzzing in the ears, deafness, blindness, weakness of the pulse, after full doses, are due to contraction of the vessels and anæmia of the ears, eyes and heart. Its prophylactic power against malaria is sufficiently demonstrated. Like all remedies of its class, it is liable to act as an irritant to the tissues; so that, in inflammatory disorders, it is often matter of doubt whether it can be employed without risk of doing harm. It is desirable—often essential—that there should be no visceral congestion when it is administered.

In like manner, the author discusses the actions of arsenic, which are very important and interesting; of iron, strychnia, digitalis, which, in suitable cases and doses, he holds to be a powerful toner of the heart's action; of tannin, sulphuric and nitric acids, opium, belladonna, aconite, cannabis Indica, hydrocyanic acid, oxygen, cold, and warmth. The vaso-motor theory is very fully used, in explanation of therapeutic actions, as of pathological states. The elements of truth in both are no doubt large; but it is improbable that actions in a highly complicated organism are so simple or so uniform, so free from numerous reciprocating influences, as the author's suppositions require. The chapter, as a whole, is full of practical value, and will well repay perusal.

In our study of this work, we have noted a few faults of style, where, like Hudibras's, the English is patched and piebald with Latin, French, and German; "Il va sans dire" that; "'ut mos est' of hospital externes"; "'au fond' a neuralgia"; "countenance 'abatlu'"; "grundleiden" here and there; "therapeutic effects 'rapprochent' them not a little"; These might better be in English than what they are. The press has not been very carefully revised. At page 6, last line, "nerve" should be "muscle"; at p. 65, "exulation" stands for "exudation"; somewhere else, "malaroid" for "maliaroid"; at p. 472, fifth line, "spasm of vaso-motor nerves" means, we presume, "spasm of arteries from vaso-motor nerve



influence"; at p. 284, "a non-excited or *active*" clearly should be "non-excited or inactive"; at p. 313, "nyctalopia" is used in an abusive manner for "hemeralopia". There is precedent for this; but it can hardly be justified, as, etymologically, it means just the reverse of what it here stands for.

These are very faint blemishes in a work of very great merit and very modest pretensions. It is a valuable addition to English medical literature.

PRACTICAL AND PATHOLOGICAL RESEARCHES ON THE VARIOUS FORMS OF PARALYSIS. By EDWARD MERYON, M.D., F.R.C.P., etc. Pp. 215. London: 1864.

THIS volume consists of six chapters, with the following titles:—1. The Minute Structure of the Nervous Centres; 2. Paralysis from Affections of the Spinal Cord; 3. Paralysis from Affections of the Brain; 4. Paralysis from Blood-poisoning; 5. Paralysis from Reflex Action; 6. Progressive Forms of Paralysis. The first two of these chapters consist of the series of papers published in the JOURNAL last year by Dr. MERYON; with, however, such additions as a revision has suggested to him, especially the insertion in full of the narratives of cases which were given briefly only in the JOURNAL. It is, therefore, not necessary for us to refer further to these chapters.

In the third chapter, Dr. Meryon speaks of Paralysis from Apoplexy, from Red Softening, from White Softening, from Induration, and from Tumours, etc. He gives, as regards apoplexy, cases illustrating the symptoms observed when the disease affects the cerebral hemispheres, the cerebellum, the crura cerebri, the pons Varolii, and the medulla oblongata; and sums up the data, afforded by paralysis, for diagnosing lesion of each of these parts. In cerebral paralysis, the characteristic lesion is loss of voluntary motion in the extremities, especially the arm, on the side opposite to the side of the brain which is affected; and the same is observed in unilateral atrophy of the cerebrum. In cases of cerebellar extravasation, satyriasis is often a prominent symptom; but here, and also in atrophy of one cerebellar hemisphere, there may be no paralysis. In extravasation into either crus cerebri, hemiplegia of the opposite side with paralysis of the third nerve of the corresponding side, are to be expected. These symptoms were observed in two cases detailed by Dr. H. Weber. In structural lesion of the pons Varolii, there will be hemiplegia, together with more or less implication of the functions of the fifth pair of nerves. "The nerves, also, which regulate the state of the pupils appear to be in close connection with the pons Varolii." When the medulla oblongata is the seat of disease, respiration, sensation, and circulation, are directly affected.

Dr. Meryon also remarks on the diagnostic signs afforded by the character of the pain, the temperature of the surface, and the irritability of paralysed muscles. A lesion seated deeply in the brain does not produce very intense suffering; whereas morbid action in the membranous coverings of the brain or on its surface invariably gives rise to severe pain. Coldness of the extremities, with pale and shrunken face and irregular pulse, point to an interference with the nerves subservient to the action of the

heart. Regarding irritability of the muscles in its relation to apoplexy, Dr. Meryon notices the opinions held by Dr. Marshall Hall and Dr. Todd.

Dr. M. Hall,

"In all cases of cerebral paralysis recorded by him, found the irritability of the muscles of paralytic limbs greater than that of the muscles of the healthy limbs; whilst in cases of paralysis of the spinal cord and of disease in the course of nerves, the muscles of the paralytic limb were found to be less irritable than those of the healthy limb." (P. 102.)

Dr. Todd, on the other hand, has brought forward cases to demonstrate that, in some morbid states of the brain, the irritability of muscles of paralysed limbs is not increased. The difference in the results was ascribed by Dr. Hall to a difference in the apparatus used; but Dr. Meryon, often repeating the experiments with a Cruikshank's battery, has obtained such varying results, that he is disposed to think that

"The greater contraction in the unsound than in the sound limb—when it is produced—is due to the restraint exercised by the will of the patient over the healthy limb, when it cannot be ascribed to irritation or inflammation of the brain." (P. 103.)

Further instructive remarks on the rigidity and flaccidity of muscles, Duchenne's experiments, on the difficulties of diagnosis, and on prognosis and treatment, will be found in the book. For restoring the paralysed muscles after cerebral excitement has passed away, Dr. Meryon says that galvanism and strychnia are useful: "but the best of all tonics is a perfect holiday"—and for this an Alpine country is to be preferred, for it is there "that every moral and physical influence is combined to promote the absorption of a blood-clot, and restore vigour and motion to the enervated muscles."

In the fifth chapter—that on Paralysis from Reflex Action—Dr. Meryon gives what he believes to be the most rational explanation of the cases termed by Dr. Handfield Jones "neurolytic paralysis" (BRITISH MEDICAL JOURNAL, Sept. 7th, 1861). In these cases, without apparent adequate cause, a connecting link between the organs of volition and of motion is for a time destroyed, but is generally regained by the action of nervine tonics. Dr. Meryon thinks there must be some structural as well as merely functional lesion.

"There are, in all these cases, certain antecedent circumstances which lead to the inference that a morbid influence has been conveyed to and concentrated upon some portion of the cerebro-spinal system, whereby the functional working of the ganglionic cells of the motor nerves is temporarily suspended." (P. 176.)

"Although we may think and speak of reflex paralysis as a purely sympathetic operation, it is, I think, not too bold an assumption to attribute the paralyzing influence to a change of nutrition in the sensory or motor centres. Nor can the absence of apparent change be accepted as positive evidence that none existed in fatal cases of reflex paralysis; for it is possible to conceive of the delicate nerve-tissue as subject to injurious pressure in consequence of vascular turgescence during life, of which no trace may be left after death. Hence much caution is necessary in the establishment of a pathological principle, seeing that we may regard as purely functional that which is dependent on some physical change." (P. 175.)

On the other hand, Dr. Meryon refers to cases of the type represented by evanescent amaurosis attending the presence of intestinal worms, and removed with the removal of this cause of irritation. On a case of this kind, where the patient, a young lady aged 14, recovered from partial paralysis of the arm, on several occasions, after passing an *ascaris lumbricoides*, Dr. Meryon remarks:

"In this case, the morbid impression upon spinal nerves through the intervention of the spinal cord was conclusively manifest; and, if the cord could have been examined, it is probable that no change from the healthy condition could have been observed." (P. 176.)

Dr. Meryon points out the fact that paralysis in children,\* while it is often clearly reflex, is sometimes undoubtedly centric in its origin.

"Although irritation from teething, worms, and other intestinal disturbances, is so common as to suggest and appear to justify the idea that all cases of infantile paralysis are due to such causes; yet, in point of fact, how many instances do we see in which no such antecedent irritation has been observed, and which are referable only to structural lesions depending upon inflammation or other nutritive changes in the nervous centres." (P. 177.)

"On the other hand, we meet with many instances in which the excitability of the nervous system is so great, that what begins as sympathetic functional disturbance ends in structural lesion; and such is the natural course of disease..... A due regard to this natural history of disease will, I think, elucidate the nature of many cases of genito-urinary paralysis, on which much diversity of opinion has been expressed within the last few years." (P. 178.)

After some remarks on the genito-urinary organs and the uterus as sources of reflex paralysis, Dr. Meryon gives the following characteristics as distinguishing reflex paralysis. His observations, he says, have corresponded with those of Dr. Brown-Séquard, in regard to the distinctions between reflex and centric paralysis.

"1. It is preceded by symptoms indicative of an affection of some other part of the body. 2. It generally varies in degree, according to the variations in the exciting cause. 3. It is usually incomplete, some muscles being more paralysed than others. 4. It is seldom accompanied with spasms in the paralysed muscles. 5. The pains in the course of the spine, the formication, flying pain, and pricking sensation, described in cases of myelitis, do not appear in reflex paralysis. 6. There is seldom anæsthesia. 7. The excitatory power of the paralysed muscles is generally retained. 8. Convulsive movements are not so apt to be excited by defecation and micturition as they are in myelitis. 9. The restoration to healthy power is often rapid after removal of the exciting cause." (P. 184.)

In the sixth chapter, Dr. Meryon speaks of the Progressive Paralysis of the Insane (following Calmeil's description); Progressive Ataxia (regarding which, Duchenne and Trousseau are his principal authorities); and Paralysis from Granular Degeneration of the Voluntary Muscles (*atrophie musculaire progressive* of the French)—a disease to which Dr. Meryon was among the first to call attention in this country.

Dr. Meryon regards this disease as one essentially and exclusively of the muscular system; and as consisting in a "breaking up of the sarcolemma of the

elementary primitive fibres, and a segregation of the granules of which the sarcous matter is composed." It is not primarily a fatty degeneration: fat-globules, Dr. Meryon says, are not found in abundance, "except where every vestige of striated muscular fibre has disappeared; and there the vital power which belongs to the higher products of animal organisation is so far weakened, as to allow those tissues to yield to the physical and chemical influences which surround them, and to degenerate into fat."

Dr. Meryon restricts the term "granular degeneration of muscles" to a limited number of the cases described as wasting palsy, or Cruveilhier's atrophy. Referring to M. Cruveilhier's opinion "that, in the disease in question, the atrophy of the anterior roots of the spinal nerves is the primitive lesion, and the muscular atrophy is the consecutive lesion," he says:

"I can well appreciate the difficulty of weaning the mind from the belief that, as all other forms of paralysis are dependent on affections of the nervous system, this must be so too..... I admit that disturbance of the nervous centres may favour the development of granular degeneration in individuals predisposed to it; but my observations have led me to the belief that this same degeneration may and does exist independent of nervous lesion." (P. 210.)

He remarks on a table of 105 cases of wasting palsy, given in Dr. W. Roberts's work on the subject, that of these he can recognise only 28 as examples of the disease which he is describing; in all the others, where details are given, there is evidence of lesion in the nerve-centres or in the peripheral nerves, or of blood-poisoning. He repeats his belief as to the pathology of the disease:

"Notwithstanding an earnest desire to find a central nervous cause, I am induced to believe in an idiopathic disease of the muscles, dependent, perhaps, on defective nutrition, just as there is an idiopathic disease of the bones dependent on the same cause. And I consider that the consequent degeneration of the muscles is characterised by a breaking up of the amorphous membrane which envelopes the primitive fibres, and a dispersion of the contained granular matter;\* that the muscles affected lose their power, in direct proportion to the amount and progress of the degeneration; and that the disease is not apt to be accompanied with symptoms of nervous disturbance." (P. 211.)

The disease has a tendency to be hereditary, and to affect males more than females. The two brothers of a patient whose case was communicated by Dr. Meryon to the Royal Medical and Chirurgical Society in 1851, have also died of granular degeneration of muscle; a fourth is the subject of the disease; while the seven daughters of the same parents are alive and perfectly healthy. In the case of another boy affected with the same disorder, the hereditary transmission is very distinctly marked.

"His mother has three married sisters; one, who very early became a widow, has one daughter, now grown up and quite healthy. Another had two sons and one daughter. Both of the sons at a very early age became affected..... The loss of power gradually extended to the upper extremities till they became quite helpless, requiring to be lifted from one chair

\* "The breaking up of the sarcolemma is a different form of degeneration from the atrophy of muscles which supervenes on lesions of the nervous centres or on simple disuse. In these latter cases, fat-globules abound between the primitive fibres, and the investing membrane does not break up."



to another, and wheeled about from place to place. The progress of the disease in both cases was centrifugal, the hands being the last affected. Their arms required to be lifted upon a table before they could amuse themselves, which they did in various ways, by writing, drawing, etc. Their intellectual powers were perfect, and they were cheerful and happy. The eldest, about 15, was dark, and very heavy for his years; the youngest, about 14, was quite the opposite, fair, red-haired, and much wasted from an affection of the chest, of which he died in 1846. His brother died a few days after..... The third sister had a family of two daughters and one son, a very fine boy. He also began, very early, to show some peculiarity in his gait, which gradually increased; and when he was 10 years of age, there was no apparent prospect of improvement. The two daughters were perfectly healthy." (P. 206.)

Little or no success has as yet attended attempts to cure this disease. Dr. Meryon, however, suggests that, if it be dependent on an alteration in the muscular tissue, some remedy should be sought for which may modify the morbid process of assimilation.

"With this feeling, it occurred to me that, as arsenic has a peculiar preservative action on dead animal tissues, it might also be the means of preserving living fibres from a disorganisation which appears to result from malnutrition; and I think it will be found that it has such power. My experience of its effects has not yet been sufficient to justify a more decided opinion, for in one case only have I given small doses of Fowler's solution, and in that the progress of the granular degeneration appears to be arrested." (P. 214.)

Dr. Meryon has studied with much care the subject on which he has written, and has collated an instructive series of facts relating thereto, furnished from his own experience and from medical literature. He has thus produced a book, in which practitioners may with advantage seek for instruction.

**MANUAL OF INSTRUCTIONS FOR THE GUIDANCE OF ARMY-SURGEONS IN TESTING THE RANGE AND QUALITY OF VISION OF RECRUITS, and in Distinguishing the Causes of Defective Vision in Soldiers.** By Deputy Inspector-General T. LONGMORE, Professor of Military Surgery in the Army Medical School. Pp. 74. London: 1864.

THE general introduction into the army of the rifle in place of the musket has rendered necessary an increased attention to the vision of the soldier; and it fortunately happens that, concurrently with this, the conditions of perfect vision, and the various forms of defective sight, have undergone an amount of investigation and have been determined with a degree of accuracy far beyond what formerly existed. Professor LONGMORE has, in this treatise, very judiciously, and very ably, endeavoured to make a practical application of modern ophthalmological science to the requirements of the army surgeon.

The book is divided into two parts; the first being on the Optical Examination, and the second on the Ophthalmoscopic Examination, of the Eye.

In the first part, the first chapter treats concisely of normal vision, and on lenses and prisms.

In the second chapter, Mr. Longmore describes various defective states of vision; viz., Emmetropia, Myopia, Hypermetropia, Astigmatism, Presbyopia, Amblyopia, Hemeralopia, Nyctalopia, Hemipopia,

Asthenopia, Strabismus, Diplopia, and Achromatopsia.

In the third chapter, he gives instructions as to the mode of determining the quality of vision of recruits, and of diagnosis of various defects.

In the second part, Mr. Longmore describes in the first chapter the Ophthalmoscope (Liebreich's) which is supplied to the army surgeons, and the method of using it.

In the second chapter, the normal ophthalmoscopic appearances of the eye are described.

In the third chapter, the ophthalmoscopic appearances and diagnostic signs of morbid conditions of the intraocular structures are described; and the importance of the study of ophthalmoscopic diagnosis is insisted on.

The composition of this *Manual* was suggested to Mr. Longmore by the Director-General; and we are sure that army medical officers will find that the task has been performed in a most efficient and instructive manner. The author has apparently given in clear and concise language just what is necessary—it being, of course, understood that, as Mr. Longmore recommends, the surgeon who desires fuller and more scientific information will consult more elaborate treatises, such as those of Von Graefe, Donders, Liebreich, Hulke, Rainy, Soelberg Wells, Hogg, and Bowman.

**A PRACTICAL ENUMERATION OF VARIOUS DISEASES OF THE HUMAN BODY IN BOTH SEXES, and in every Period of Life, which may be cured or successfully treated by the Remedies of Legitimate Medicine.** By W. S. OKE, M.D., Consulting Physician to the Royal South Hants Infirmary. Pp. 100. London: 1864.

ONE of our oldest members, Dr. OKE of Southampton, who has been for many years a frequent contributor to this JOURNAL, has here described, in a short compass, the symptoms of the most common diseases to which the human body is subject, and the remedies which, during a long life of active practice, he has found successful. It is a pleasant and satisfactory manner of spending some hours of the day, after the active life of a hard worked physician is passed, to bring to remembrance the whole range of disease, and to make the shortest statement of that treatment which he knows to have been useful, merely relating those plans which were of benefit. We have often wished that a few of the leisure hours of retirement, after a busy life, were more often spent in reducing to writing that really valuable matter which the experienced practitioner possesses, so that the truths of a long life might be preserved for the use of the younger ones. As a rule, now, the valuable part of the medical experience of our best practitioners dies with them. Much, of course, cannot be transmitted in words. The application of any rules depends on the observation, the judgment, the practical skill, of the individual, and perishes with him. But, if much also of valuable matter could not be reduced to writing, where would be our scientific knowledge of practical medicine?

In this little book, the treatment of one hundred diseases is shortly given; and there are very few practitioners engaged in active practice who would not find the benefit of having it on their table as a "handy book" to refer to occasionally when in doubt

or in want of a remedy. It is like asking a senior what he has found useful; and all know that the advantage of consultations is, that another's practice is seen, and routine often very usefully disturbed. We have faith, too, in a book where there can be no other motive in its publication than the wish to be useful as long as life is given, when that life has been one of unusual success in the practice of medicine.

## British Medical Journal.

SATURDAY, OCTOBER 15TH, 1864.

### FREE TRADE IN PHYSIC.

A CORONER'S jury at Brighton have brought in a verdict of *felo-de-se* against a woman for having poisoned herself, for fatally taking ergot of rye for the purpose of procuring abortion. Dr. Stephens was called in shortly before she died, and, finding her suffering from violent vomiting and anomalous symptoms, very properly refused to give a certificate that death resulted from natural causes. This led to an inquiry; and it then turned out that the poor woman had, for eleven weeks at all events, been taking ergot of rye, for the purpose of procuring abortion. Several questions of interest turned up during the inquiry. Who supplied the medicine? Who prescribed it? What are the symptoms of a poisonous dose of ergot? The physic, it appeared, was prescribed by a gentleman who was *non est inventus*, one Dr. Rymer, as he called himself, who appeared to be of ubiquitous movements, and who was, it was said, wanted by the police, as well as by the coroner's jury. His address was, "Dr. Rym—, P. O., St. Martin's-le-Grand." A servant, who had seen him, "thought from his dress that he was a country minister"; but she was informed by her mistress that he was, in truth, the "family physician". The quantity of ergot taken by the woman is not mentioned in the report of the inquest; but we believe the following is a copy of the prescription of the medicine ordered by the clerical-looking man, and which was taken continuously for eleven weeks.

R. Tinct. secal. cornut. ʒij; ol. mentha pulegii ʒij. Misco. Take one teaspoonful in water three times a day.

Naturally, the jury inquired whether the druggist did right in making up this prescription week after week for the woman; and they very properly, in our opinion, by their verdict, inferred that the druggist had not shown due precaution in dealing out such a deleterious prescription week after week to the same person. The prescription was signed "J. D. R.", and was regarded as the prescription of an authorised medical man. Now, so far the matter seemed clear enough; viz., that the woman had

taken the ergot for the purpose of procuring abortion, and died from the effects thereof. But *ubi tres medici duo athei* is a very old adage, and here it met with its example again, or something like it; for now appeared a volunteer on the coroner's stage, Dr. Edward Roberts, who came, he said, "out of friendship to Mr. Garrett", the druggist, and who, we must add, certainly allowed his feelings in that way to get the better of his judgment.

"Dr. Edward Roberts deposed: I reside at Burgess Hill. I have had great practice. Mr. Garrett was an assistant with me about two years about fourteen years ago. He was in the habit of largely dispensing the medicine ergot of rye in its different forms, and he was fully aware of its effects. He has known it to be given for three weeks together in as large or larger doses than have been mentioned; always in womb affections. He was then a most competent dispenser, and I had the most unlimited confidence in him. I disagree largely with Mr. Kemp with regard to secale producing death."

"Coroner: Do I understand you to say that ergot of rye, taken week after week for nine weeks, would not produce death?—No, undoubtedly not. I should not look for death from it. Death would be from indirect causes."

Dr. Roberts then went on to say that he entirely differed from Professor Taylor, and, we suppose we may add, from every one else who knows anything about the matter, as to the effects of ergot. For the sake of the profession, it was, of course, a pity to see such difference of opinion on such a point publicly stated; but, happily, the jury were not led away by the doctor's evidence, as he himself appears to have been by his feelings towards his late assistant.

Another point worthy of consideration here is this—Would it not be well if medical men, instead of appending their initials, were invariably to write their names in full after their prescriptions? In such case, the druggist (if he have any doubt as to the writer of it) can at once turn to the *Medical Register*, and learn if he be or be not a qualified medical man. Had this course been followed in the present instance, the druggist would have found whether the writer of the prescription was or was not on the list of registered practitioners, and might then have had his suspicions excited.

Another point touches the amount of knowledge of the effects of drugs which should be required of those who compound them. The profession will conclude, doubtless, that no druggist should make up a prescription consisting mainly of ergot of rye in large doses, week after week, for the same female, without having his suspicions gravely excited as to the propriety of the medicine. Every druggist should know enough of the action of the drugs he makes up to teach him the lesson of prudence in such a case. Altogether, the affair is just another of the daily occurring proofs of the unsatisfactory condition of the healing art in relation to the public. Science comes forward in the person of Dr. Stephens, and informs Justice that a great wrong has been done; that a



deadly medicine has been prescribed by a *soi-disant* "doctor", of "clerical appearance", "the family physician", who is not to be found; and it is also shown, that the woman—the victim—took the medicine to procure abortion; that a druggist made up a certainly very unusual prescription, containing an agent which is notorious for its action on the womb, bottle after bottle, without suspicion of the purpose for which it was employed; and then, to cap it all, a medical man comes forward to declare that, in his opinion, Dr. Stephens's evidence was wrong, and the whole theory as to the cause of death a mistake—comes forward, in fact, to bewilder coroner and jury, and, we fear, to give an opening to those who are fond of turning our profession into ridicule.

"The Coroner said, he should have thought, when he came into that room to-day, that there would have been no difference of opinion as to the cause of the woman's death; but Dr. Roberts had told them that, in his opinion, death could never be primarily caused by ergot of rye. Dr. Stephens's experience of the case, and the description he had given them of the appearance of the body, both before and after death, were very important; and they must consider how far the opinion of Dr. Roberts was to be taken in opposition, not only to his opinion, but also to Dr. Taylor. Difference of opinion would exist between medical men, as with all other classes of the community; but, for his own part, he had no hesitation in saying, with the opinion of Dr. Stephens, that as it was by that of Professor Taylor, that the death was caused by injury to the organs of digestion, and other organs, by the use of ergot of rye."

Common-sense and science, as we have seen, however, so far happily prevailed; and the jury returned a proper verdict. But, alas! when we come to ask for public "satisfaction" in the case, where is it to be found? As, in the great Crimean shortcomings, we have to ask in vain, "Whom shall we hang?"

### VAIN PROSECUTIONS.

MR. TALLEY has been distinguishing himself in the daily papers, by appearing in the police offices as prosecutor of real offenders and of supposed offenders against the Medical Act. It does not appear that Mr. Talley is the legal agent of any one in particular. He certainly is not the agent of the Medical Council. From his mode of conducting his cause, we conclude that he is acting *sud sponte*, enthusiastically it may be, out of sheer disgust at the villainies which are daily practised by so-called members of the medical profession. Mr. Talley, in thus conducting these prosecutions, has done both harm and good. He has done harm to the cause he would advocate, by his manifest indiscretion in the manner of conducting it. He has, in fact, given magistrates, and the public too, we fear, a distaste to the same. But he has, also, done good, in showing how utterly unable the present Medical Act is to compete with the evils which it has the pretension of abating. In a country like this, where free trade is the breath of its nostrils, it

seems to us almost hopeless to expect that any good can be done by the prosecution of quacks and quackeries and irregularities of practice. So long as the fact remains, that any man or woman in the country may practise medicine or surgery, it seems reasonable to conclude that it is vain to hope to arrest the evil by attacking the unlawful assumption of the titles which indicate the practice of medicine and surgery. This much, at all events, is certain, and we would call especial attention to it; viz., that if ever such prosecutions are to have a chance of success, they must be undertaken by the Medical Council itself. Assuredly, if it be the duty of any one, it is the duty of the Medical Council to see that the powers of the Medical Act are clearly defined and fully carried out. Most of us will agree that the Council might much better expend some of its large income in trying conclusions as to the real value and meaning and powers of the Act, than in using up all its means in interminable and purposeless disputations on Medical Education. The Medical Council should, at all events, set its house in order. It either has, or it has not, the power which it is supposed to possess. If it have the power, it is bound in honour to exercise it. If it have not the power, then let it go to Parliament and get its powers better defined, more extended, or more curtailed. Let it know, and let the profession know, what its real functions and capacity are.

A FEW weeks since, there was reported in the French medical journals a very remarkable case of attempted deception on the part of a young female. She asserted that her person had been grossly violated, and that her violators had attempted to strangle her. Two men, on the strength of her assertions, were arrested and kept for some time in prison. Unfortunately, the girl's tale had imposed on one medical man, who gave evidence which in some degree corroborated her falsehoods. On the investigation of an expert, however, the truth came out; and it was shown that the girl was a shameful impostor, and that the men were perfectly innocent. We are reminded of this case while reading the cruel injury—the ruin—which a girl a few days ago attempted to bring upon a member of our profession—accusing him, in fact, of having accomplished her ruin whilst professionally engaged with her. Happily, the case was disposed of at once before the magistrate, and the whole tale proved to demonstration to be a base calumny. Such facts, however, are warnings to the medical witness, and of much interest to the psychological physician. They show the extreme caution with which such accusations, made by young females, should be received; and present examples of that strange and perverted, we might say demoniacal, condition of the moral sentiments, which is occasion-

ally met with in females at a certain period of life. The magistrate took a merciful view of the girl's conduct, and trusted that it might in some way be ascribed to aberration of intellect incidental to her age and condition.

THE profession will do itself great injustice, if it do not seize upon the present occasion of doing justice to Mr. Griffin. Mr. Griffin has shown disinterestedness, devotion, energy, and the highest philanthropy, in his attempts to better the condition of our Poor-law medical brethren. No gentleman could have a better claim to the thanks of our profession; and we feel very strongly that it is not alone from those of our profession who are engaged in the service of the Poor-law administration, that Mr. Griffin should receive thanks. Any one who devotes himself to the good of his medical brethren, as Mr. Griffin has done, well merits a public acknowledgment. The qualities which he has shown in the cause to which he has devoted so much time and so much pains, are not of so common a sort as to be passed by without recognition. In honouring men of the stamp of Mr. Griffin, the profession shows that it knows how to honour itself.

DR. CRAIG MACLAGAN, in a paper lately read before the Edinburgh Medico-Chirurgical Society, shows that the "arsenic-eating" of Styria is no fable. On a late visit to Styria, he took occasion to investigate the matter himself; and, with his own eyes, saw one man swallow over four grains of arsenious acid at a dose, without suffering any poisonous symptoms. He afterwards found arsenic in the man's urine. Another man swallowed in the doctor's presence, six grains of arsenious acid, eating it on bread and butter.

"The man stated that he generally takes about the quantity we saw him swallow once a week, but with variations in the intervals, there being sometimes four days only, sometimes eight days, between the doses; that when he has a distance to walk to his work, he takes a larger dose, and is then in good spirits for about eight days; that if he, however, intermit it for fourteen days, he feels stiff in the feet, with general lassitude, and a craving for another dose. If his vicissitudes are hard of digestion, he takes a dose to assist the stomach; and if he take a rather full dose, he brings a good deal of wind off his stomach, but never vomits. He stated that his father had taken arsenic before him, and in considerable quantity; and that, in the immediate neighbourhood of Liegister, numbers use it, several taking it daily, and many in larger doses than he. He said that all who take it are healthy; that he never knew of any one vomiting from its use; and he believed that, like the use of tobacco, if the dose is very gradually diminished, an arsenic-eater can break himself of the habit."

DR. POLLI, as our readers may remember, some years ago appeared to have made a great therapeutical discovery touching the cure of fevers and certain diseases of a septic kind by the aid of sulphites. Dr. Mariano Semmola gives, we are sorry to say, a modi-

fied view of the case. The sulphites, he says, are certainly capable of arresting fermentation in a chemical sense; but they have no sensible physiological action. The physiological phenomena of oxidation continue unaltered under the action of the sulphites; the quantity of urea, carbonic acid, and water, excreted during the twenty-four hours, remaining unchanged. The diseases which are supposed to be the products of some morbid fermentation—typhus, scarlatina, marsh-fevers, measles, etc.—are not influenced by the sulphites; neither are syphilis, purulent infection, etc. The fermentation theory of the origin of these diseases is hypothetical, and opposed to clinical facts. The diseases in which the action of the sulphites is incontestable, and indeed remarkable, are putrid infections not resulting from any specific disease. The sulphites destroy the action of the putrid substances which have been absorbed, and completely remove putrid emanations when locally applied. Sulphite of lime, considered as a remedy capable of favouring the cretaceous formation of tubercle, is just one more of the thousand therapeutical illusions recommended in phthisis.

The question of the transmissibility of syphilis in animals has lately undergone discussion in the Academy of Medicine—*à propos* of a cat which was supposed to have been infected by eating charpie, etc., saturated with the virus, in the Hôpital du Midi. This fact was regarded as apocryphal; and the general opinion was, that the disease was purely a human disease; and that no observer had ever yet succeeded in artificially producing it in animals, or had ever seen it existing in animals.

M. Koenig has announced a new stethoscope, which possesses marvellous sound-conducting powers. He owes, he says, to M. Hiffelsheim the first idea of the instrument. It is formed of a very thin bladder of caoutchouc, into which air is forcibly blown. It is placed in a wooden case; and the sounds are passed through the condensed air to the ear of the observer.

What we should here regard as almost impossible appears to be of not unfrequent occurrence in France; viz., the communication of syphilis through catheterism of the Eustachian canal. Several cases of the kind have already been related; one or two of them authenticated by M. Ricord. M. Lailier now records another carefully observed case, and gives full details of it; from which it would seem certain that the patient was affected with syphilis; that the disease arose subsequent to the frequent catheterism of the Eustachian tube for deafness; and that the catheterism was the cause of the infection. It really, as we have said, seems incomprehensible, that any aurist could be guilty of such a filthy and shameful act as using dirty instruments in cases of this kind; but we must record what seem thoroughly well authenticated facts.



# Association Intelligence.

## MEDICAL PROVIDENT FUND.

THE Chairman of the Directorate has received intimation of the following appointments of Directors by the Branches.

*East Anglian Branch.* B. Chevallier, M.D. (Ipswich).

*Yorkshire Branch.* William Hey, Esq. (Leeds); William D. Husband, Esq. (York).

*Metropolitan Counties Branch.* Charles F. J. Lord, Esq. (Hampstead); Edward H. Sieveking, M.D. (London); A. P. Stewart, M.D. (London).

DR. RICHARDSON begs to announce the following contributions to the Guarantee Fund—

|                                    | £.  | s. | d. |
|------------------------------------|-----|----|----|
| Amount already contributed.....    | 312 | 13 | 0  |
| Dr. Osmerod (Brighton) .....       | 10  | 10 | 0  |
| Dr. Radclyffe Hall (Torquay) ..... | 10  | 10 | 0  |

Further contributions will be announced.

12 Nile Street, Manchester Square, W.

## BATH AND BRISTOL BRANCH.

THE first Ordinary Meeting of the session will be held in the Victoria Rooms, Clifton, on Monday evening, October 17th, at 7 o'clock; R. W. FALCONER, M.D., President, in the Chair.

The first business of the meeting will be to elect two members of the Branch as Directors of the Provident Relief Fund of the Association.

H. MARSHALL, M.D. } *Hon. Secs.*  
R. S. FOWLER. }

Clifton, October 1st, 1864.

## SOUTH MIDLAND BRANCH.

THE Autumnal Meeting of the South Midland Branch will be held at Buckingham, on Tuesday, October 18, at 1 p.m.; H. VEASEY, Esq., President.

Gentlemen intending to read papers or cases, are requested to forward the same, as early as convenient, to Dr. Bryan, Northampton.

JOHN M. BRYAN, M.D., *Hon. Sec.*

Northampton, September 1864.

## SHROPSHIRE SCIENTIFIC BRANCH.

THE Annual Meeting of this Branch will be held at the Lion Hotel, Shrewsbury, on Wednesday, October 19th, at 2.30 p.m.

Dinner at 4.30 p.m. T. B. BARRETT, Esq., President; J. W. MOORHOUSE, Esq., Vice-President.

## SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will be held at the West Kent General Hospital, at Maidstone, on Friday, October 28th, at 2.15 p.m.

Dinner will be ordered at the Mitre Hotel at 5 p.m. Tickets, 5s., exclusive of wine.

Dr. MONCKTON has consented to occupy the Chair; and papers are promised by Fred. Fry, Esq., F.R.C.S. (Severe Injury to Brain: patient surviving thirteen months); and by G. H. FURBER, Esq. (Spontaneous Evolution of the Full-grown Fœtus).

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rockester, October 12th, 1864.

## BRANCH MEETINGS TO BE HELD.

| NAME OF BRANCH.                     | PLACE OF MEETING.                         | DATE.                            |
|-------------------------------------|---|----------------------------------|
| BATH AND BRISTOL.<br>[Ordinary.]    | Victoria Rooms,<br>Clifton.               | Monday,<br>Oct. 17, 7 p.m.       |
| SOUTH MIDLAND.<br>[Autumnal.]       | Buckingham.                               | Tuesday,<br>Oct. 18, 1 p.m.      |
| SHROPSHIRE SCIENTIFIC.<br>[Annual.] | Lion Hotel,<br>Shrewsbury.                | Wed., Oct. 19,<br>2.30 p.m.      |
| SOUTH-EASTERN.<br>[General.]        | West Kent General<br>Hospital, Maidstone. | Friday, October<br>28, 2.15 p.m. |

## SOUTH-WESTERN BRANCH: MEETING.

A MEETING of this Branch was held at the Devon and Exeter Hospital on October 4th, for the purpose of electing three Directors to the Provident Relief Fund. There were present: Dr. RADCLYFFE HALL (Torquay) in the chair; Dr. Ackland (Bideford); Dr. Bennie (Lymington); Dr. Potter (Cullompton); C. H. Roper, Esq. (Exeter); and Dr. Thomas (Hartland).

*Resolutions.* The following resolutions were passed. Proposed by Dr. POTTER, and seconded by Dr. BENNIE—

“That P. C. De la Garde, Esq., of Exeter; T. L. Pridham, Esq., of Bideford; and Dr. Cookworthy, of Plymouth; be appointed three of the Directors of the Provident Relief Fund, subject to their acceptance of the office.”

Proposed by Dr. THOMAS, and seconded by Dr. ACKLAND—

“That it be recommended to the Committee of Council, that the Relief Fund should be confined to sickness arising from disease, and not from accidents; as the latter could be provided for by insurance in the Accidental Insurance offices.”

“That, as regards limiting the Relief Fund solely to the members of the Association, a request should be inserted in the JOURNAL that each member should communicate to the Chairman of the Directorate his feelings on the matter; and that the wishes of the majority should be carried out.”

## NORTH WALES BRANCH: GENERAL MEETING.

A SPECIAL General Meeting of the members of this Branch was held on Tuesday, October 4th, at 3 p.m., at the Bull Hotel, Denbigh, under the presidency of W. WILLIAMS, M.D., of Mold.

*Medical Provident Fund.* Upon the proposition of Mr. TURNER JONES (Denbigh), seconded by Mr. LL. LODGE (St. Asaph), Thomas Taylor Griffith, Esq., of Wrexham, was unanimously elected to represent this Branch in the Board of Directors of the Medical Provident Fund of the British Medical Association.

*Dinner.* After the business, for which the members had assembled, had concluded, they dined together at the hotel.

**HEALTH OF THE FRENCH ARMY.** A report by Marshal Randon contains some interesting information with respect to the sanitary condition of the French army. The mortality in the army has for some time, it appears, been on the decrease. “In 1846, the annual mortality was, among the troops in France, 19 deaths per 1000 men, and in Algeria 64. In 1862 and 1863, there were only 10 deaths per 1000 in France, and about 12 in Algeria.” Judging from the context, the decrease in French garrisons is very important. A corresponding diminution is observed in the men in hospital; in 1842, one twenty-third of the army; in 1852, one-thirtieth; in 1862, one thirty-ninth part of the army.

## Reports of Societies.

### BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[Held at Bath, September 1864.]

*The Relation and Special Application of Fat and Sugar as Respiratory Food.* By THOMAS HAYDEN, M.D. The author believed that fat and sugar possess different values as food; that they undergo different transformations, and, during these transformations, subserve distinct purposes of economy; that the period of their retention in the body is the same; that they are not mutually convertible; but that ultimately they pass out of the body under the common form of carbonic acid and water, and are jointly concerned in the production of animal heat. After noting the mechanical purposes of adipose tissue, he alluded to the provision made in the fat deposited in the body, for the maintenance of animal heat during a certain period, under circumstances of total deprivation of heat-producing food. But, before deposited fat can become available for this purpose, it must undergo disintegration, or dissimulation, and be re-absorbed into the blood. Dr. Hayden did not deny that the adipose, like other tissues of the body, is constantly undergoing gradual molecular destruction; but what he desired to convey was that fat must be always in the first instance assimilated, and can, under no circumstances, be applied to the maintenance of animal heat before undergoing the twofold process of constructive and destructive assimilation. Amylo-saccharine substances, on the other hand, are immediately and directly passed off from the blood, and are never assimilated in the proper acceptation of the term. Of the starch taken in as food, however, a certain proportion escapes the action of the saliva, and is deposited in the liver, probably in the hepatic cells, whence it is drawn to supply heat when the amount of sugar in the food recently taken happens to be insufficient, or when the body is exposed to highly refrigerating influences. Having referred to the experiments of Pavy, Bernard, Sanson, Poggiale, and Rognet, Dr. Hayden said that he was engaged in a series of experiments, and, from the observations he had so far made, had arrived at the following conclusions. The amount of fat deposited in the body is regulated by the absolute and relative quantity of oleaginous and saccharine matter in the food taken; both substances, taken in a large quantity, cause excessive deposits of fat. If the fat taken be in defect, even though the sugar be in excess, no increase in the deposit of fat takes place, but rather a decrease; obviously in consequence of ordinary molecular absorption, to which the adipose, in common with other tissues, is subject, not being counterbalanced by assimilation. If the fat taken be in excess, whilst the sugar is insufficient to meet the immediate wants of the respiratory function, still the deposit of fat may not undergo increase, but the contrary; apparently because a portion of that already deposited must undergo reabsorption into the blood for the purpose of supplying heat. Fat is, therefore, as a heat-producing substance, only supplemental of sugar, which is the ordinary *pabulum* of respiration. Saliva, like gastric juice, is secreted in quantity strictly proportioned to the immediate wants of the system, and quite irrespectively of the absolute quantity of food taken; a certain proportion of the starch of the food,

varying according to the quantity taken, and the necessity of respiration, escapes the converting action of the saliva, and is stored up in the liver. This liver-starch is being taken constantly back into the blood to supplement the respiratory elements of the food, and in the blood is converted into sugar, probably next into lactic acid, and finally into carbonic acid. Hence the presence of sugar, normally, in small proportion in the blood of the right side of the heart; hence, likewise, its presence in the right heart of animals fed exclusively upon meat, in whose portal blood not a trace of sugar is discoverable.

*Meat as a Source of Entozoa.* By T. S. COBBOLD, M.D., F.R.S. Referring first to beef and veal, he described the various species of tapeworm to be found in cattle. He also referred to the difficulty of detecting these parasites, even by a skilled veterinary surgeon; but added that all danger of injury to mankind, from their presence, was avoided by cooking the meat at a high temperature—say 212 Fahrenheit. Most of the tapeworms inhabiting sheep did not appear capable of living in the human body; still it was a wise precaution never to take meat undone. Pork was the most injurious; and there was now no question that the measles inhabiting the pig was communicated in the pork eaten. If the poor would only abandon their semi-civilised habits of eating raw or half-cooked meat, the evil would soon cease altogether. A great variety of entozoa was to be found in game, but they were, for the most part, of innocuous classes. In fish they were more abundant than in either birds or mammals; but there was reason to believe that fish might be eaten either cooked or raw without danger to the consumer.

*Vegetables, Fruits, and Water, as a Source of Entozoa.* By T. S. COBBOLD, M.D., F.R.S. There was no doubt that entozoa were introduced with vegetable food. Small moluscs harboured parasites in prodigious quantities, and they were the source of one or more of the parasites that occasionally invaded the human form. These entozoa might be taken in water drinking, but they were much more likely to be taken from water-cress, or other vegetables of the kind. It was necessary with all vegetables that the greatest cleanliness should be observed in preparing them for the table, and care should be taken to avoid swallowing these small molluscs, which were very likely to escape observation. A large species of the tapeworm, discovered in Egypt, would, he was afraid, be brought to this country at some time from our colonies; and if ever it got place amongst us, it would be difficult of extermination. Eggs and living specimens had been found in this country, both in men and monkeys, but only to a very small extent. He was the first to discover it in the monkey. There was no evidence to show that any species of entozoa was derivable from fruit. A great many evils in children were charged to eating unripe food, but, as far as entozoa were concerned, that fear was entirely groundless; and if they should be so introduced, the chances were that the larvæ would be taken from the surface of the fruit. With regard to celery, cabbages, and all the ordinary market-garden vegetables, he might say that all decomposing animal and vegetable matter sustained entozoa, and the more filthy the water or liquid manure employed to secure the fertility of the garden, the more likely was a supply of entozoa to be taken with the vegetables grown upon the land. The most careful washing was, therefore, required. Parasitic larvæ might be found in water that was to all appearance perfectly pure; but speaking generally, it might be inferred that fresh spring water was perfectly innocuous. The same thing could not be said of water stored in large tanks in hot climates. The presence or absence of the larvæ of human entozoa in water



was dependent upon the place whence the supply came, and upon the condition of the water. The pork measles might be readily communicated to human beings in this way; and there was another species taken from water, the habit of which was to esconce itself in the brain, causing death. There was one kind inhabiting dogs which was often communicated to the human being. One-sixth of all persons who died in Iceland perished from a little creature so small that in its larval state it could scarcely be seen. No one need drink water impregnated with these entozoa. The danger would be got rid of if the water was always carefully boiled, filtered, or distilled; but a filter to be effectual ought not to pass anything larger than one one-thousandth of an inch. Sand and charcoal filters were of very little use. Paper filters should be employed. All entozoa not preserved for scientific experiments should be destroyed by fire. Beer, porter, etc., he believed perfectly harmless. Even though impure waters should have been employed, the boiling of the wort would be alone sufficient to destroy any number of parasites. As to unfermented drinks, such as ginger beer, cyder, and the like, there could not be perfect certainty. All must depend upon the source and the supply of water. In regard to wines, the same remarks were applicable. Alcohol added to water was sufficient to destroy the parasitical eggs; but he questioned whether the amount of spirit in our home-made wines was sufficient for the purpose.

*Report on the Physiological Action of Nitrite of Amyl.* By B. W. RICHARDSON, M.D. The author described nitrite of amyl as an amber-coloured fluid, smelling and tasting like essence of pears; and gave a classification of numerous experiments which he had performed with it. It arrested oxidation, and prevented the process of decomposition in animal and vegetable substances. The following was Dr. Richardson's summary of the effects of nitrite of amyl. 1. It is absorbed by the body, however introduced, whether by the skin, the stomach, the lungs, or by inoculation. 2. After its absorption, its effects are immediately seen on the heart and circulation. There is, in the first place, violent action of the heart, with dilatation of the capillaries, followed by diminished, but not extinguished, power of the heart and contraction of the extreme vessels. As an excitant of vascular action, the nitrite of amyl may be considered the most powerful agent yet discovered by the physiologist. 3. In animals whose bodies admit of its removal spontaneously, and whose circulatory and respiratory systems are simple, such as frogs, the nitrite suspends animation; and when the animals are placed under favourable circumstances for the process of recovery, they may recover. There is no other known substance that suspends animation in frogs for so long a period of time. In warm blooded animals, which are clothed in a skin less permeable, and in whose bodies the circulatory and respiratory systems are more complicated, the nitrite cannot actually stop the movements of respiration and circulation without destroying life. But even in these animals it can reduce respiration and circulation so extremely, that a condition precisely analogous to what is known as trance or catalepsy in the human subject, can be induced by it, and be sustained for many hours. 4. The nitrite of amyl is not an anæsthetic; by it consciousness is never destroyed, unless death is produced. 5. The effect of the nitrite on the organism is directed to the motive force, which it first wildly excites and then subdues. 6. The *modus operandi* of the nitrite appears to be by arresting the process of oxidation in the tissues. 7. Physically, the nitrite holds a place between the volatile bodies, such as chloroform or ether, and the solid bodies, such as opium and woorali; hence its effects

are less evanescent than those arising from the volatile substances, and less destructive than those produced by the solid substances. In this lies the secret of the peculiar action of the nitrite. He described the pathological or diseased conditions produced by it; its effects as compared with other compounds of amyl, and numerous other substances; and the reason why it should so powerfully influence the circulation. He then put the question, whether with the facts now known we ought to deny the possibility of placing the body in such a condition that it may for some hours, or even days, assume the appearance of death? In catalepsy, or trance, we see such an appearance of death in a disease; and we have heard of the famous experiment of the Fakirs of India, in which they seem to hold life for a time in abeyance. Dr. Richardson thought that in catalepsy there was found in the body a substance which acted like the nitrite of amyl. He thought, also, it was possible that the Fakirs possessed a substance derived from the vegetable world that had the property of producing the same effects in a marked degree. In conclusion, the author discussed the question of the value of the nitrite of amyl as a remedy in the treatment of disease. He had not had time, practically, to try this point; but he suggested that the substance would probably be found of service in cases of sudden failure of the heart. He also believed it would prove serviceable in the treatment of tetanus; that it would, by its paralyzing action on the voluntary muscles, check the tetanic spasms, and, by enabling the patient to live through the acute attack, would give time for the system to become relieved of the primary malady. As there was no known remedy for tetanus, Dr. Richardson urged the trial of the nitrite of amyl strongly. The whole of the amyl series required to be investigated physiologically; the inquiry promised to be attended with the most important results.

*Preparations of Bromine.* By G. D. GIBB, M.D. Bromide of lithium was prepared with the view of treating gout and rheumatism of the throat and neck. In small doses, it acted as a tonic gentle stimulant, and sometimes as a diuretic, and might be combined with other agents with advantage. The bromide of zinc he had found to relieve impaired nervous power; and he proposed bromide of lead as a soothing and cool local agent in certain inflamed states of the mucous membrane.

*The Hour of Death in Acute and Chronic Disease.* By ALFRED HAVILAND, Esq. The author had collected over 5000 cases of death, with the hour of death, and other circumstances recorded, which he had tabulated and exhibited on a large chart. By this chart, he showed that, in 1000 cases of death in children under five years of age, the periods of the greatest mortality took place during the hours between 1 and 8 A.M.; and that, in the succeeding hours between 9 and 12 P.M., the rate of mortality was at its minimum. He then compared these statistics with 2891 deaths from all causes; and the chart showed how remarkably the wave lines of death compared with those above. Deaths from consumption, although they showed a general resemblance in the wave line, yet between the hours of 4 to 8 A.M., showed a depression, when compared with the first four hours period. He contended that the tables on the chart proved the extraordinary mortality in the early hours of the morning when the powers of life were at their lowest ebb. He urged the necessity of feeding and stimulating the patient at their weakest hour, so as to tide them over a critical period, and, even if death be inevitable, to so support the patient that he might at least have a few hours more of life snatched from eternity to admit of his being able to carry out some neglected duty, pardon some enemy,

and see some beloved friend. He finally urged upon his professional brethren the high importance of teaching friends and nurses how to attend to those under their charge.

## Correspondence.

### PUNCTURE OF THE BLADDER & PERINEAL SECTION.

LETTER FROM THOMAS PAGET, ESQ.

SIR,—I have delayed noticing the letter of Dr. Morris, published in your number of August 27th, until others who might wish to make observations on the subject had had time to do so.

I assure Dr. Morris that I receive his remarks in the spirit of indulgence which should ever attend the movements of science. I can also allow him to think "his patients in a better state than mine"; that is, if he can so think when he has read again, and with more attention, my cases and remarks published in the JOURNAL, of July 2nd, 1859.

He will then find that no "great annoyance and inconvenience was experienced by a person having an elastic gum catheter constantly protruding through the walls of the abdomen", simply because no catheter is used; there is only a tube and shield, the whole length of which is named as "about three inches."

In fact, the only projection from the body in my cases is that of the ordinary silver shield of a common bladder-cannula, which does not exceed half an inch, and is situated in the receding portion of the hypogastrium, where the clothing cannot roughly touch it. I am told by my patients that no inconvenience is felt from it. It is, then, Dr. Morris's own cases that must have suggested to him the protruding catheters; and their annoyance and inconvenience must have suggested them, too, as being felt by my patients. One of his "has worn the catheter ever since the operation, changing it every fourth or fifth day"; for the other, he says, "I replace the catheter every fourth day with a new one, as they become furred up and useless."

I submit, then, that his time for preferring the state of his patient to that of mine, though it may come, is not yet. Our respective patients will be upon an equality only, when he shall be able to report them, as I have mine, freshened in condition, erect, and free in gait; one of them "rejoicing in the opportunities business allows him of walking four or five miles, which he does perfectly free from pain." At present, he can only congratulate them upon—1, the blessing of relief from pain, not a small one to those who have suffered from retention of urine; 2, the advantage of being able to wear a catheter, protruding from the body, with "the great annoyance and inconvenience" of such protrusions; 3, the opportunity of cherishing the pleasing fiction that they are not micturating by the tube, but "at their pleasure, passing their urine through the penis" all the while.

But the two operations themselves have to be compared. The section, always viewed as severe, attended with after-peril, and uncertain in practicability and degree of success. The puncture now described, simple, certain, devoid of peril, and free from objection, for persons above 60. I must own that no sneer upon it, as "an easy and ready way of getting out a difficulty", will drive me from preferring the latter, and considering my patient as cured of the stricture he no longer feels or fears. The results of perineal section must be shewn far to out-

weigh in benefit those of puncture, and must very much exceed those of Dr. Morris's present description, to change my feeling. Perhaps, I ought to blush at a want of heroism, when candour draws from me the avowal, that though an "aspiring operator", I have never entertained any feeling short of the highest possible respect for that which I now find sneered at; viz., "an easy and ready way of getting out of a difficulty."

I am, etc.,

THOMAS PAGET.

Exeter, Sept. 23d, 1864.

### THE DIET OF CHILD-BED.

LETTER FROM GRAILY HEWITT, M.D.

SIR,—Permit me to make a few remarks in reply to Mr. Pope's letter (*vide* BRITISH MEDICAL JOURNAL, September 24), criticising a paper recently published by me in the *Lancet*, on the Diet of Child-Bed.

I am sorry that the views I have advocated, as regards the dietary of women during child-bed, do not meet the approval of a gentleman who is pleased to speak of me so eulogistically; but I can do no less than defend my opinions, arrived at, as they have been, after mature deliberation, and supported by what I conceive to be sound argument.

I shall content myself with replying to the arguments adduced by Mr. Pope; and I hope yet to win him to my side of the question.

Mr. Pope, in his letter, appears to consider that the digestive organs of a woman recently delivered are in a state "more or less deranged"; and he states that the gravid uterus has, during the latter half of pregnancy, "so compressed the whole of the abdominal viscera, and more so those immediately connected with the digestive function, as to leave them in a state unfit for such diet" (the generous diet recommended by myself). May I ask Mr. Pope for the proof of this? Is it, or is it not, the fact, that women are, as a rule, capable of eating a good dinner, and digesting it easily and comfortably, up to the very hour when labour begins? If Mr. Pope's assertion were correct, the only logical conclusion would be that, during the latter half of pregnancy, the ordinary quantity of food could not be taken—a conclusion which I should imagine Mr. Pope is hardly prepared to adopt. I can assure him that, if he will make the experiment, he will find that the digestive powers are as good on the day following a natural labour as on the day before it, and that his patients will be thankful to be allowed, without delay, to recruit their exhausted forces, by taking the food to which they are accustomed. When the exhaustion is great, the digestive powers may be, as I have already remarked, weakened; and, in such cases, prompt administration of stimulants is necessary, for these supply the place of ordinary food.

"Generally" (says Mr. Pope), "before the secretion of the milk, fever must supervene"; and this fever is, Mr. Pope adds, "mainly regulated by the diet." I repeat, that "milk-fever" is, on the contrary, so far as my experience teaches me, very rare; while its importance is, I believe, altogether over-estimated. I agree with Mr. Pope, in considering that it is to be regulated by the diet; but I have no faith in a low diet for the purpose of preventing it. The fact that I have witnessed it so very rarely—and it is a fact—while I have been for some time in the habit of administering a liberal diet from the first, is, at all events, worth something as an argument; weakness and feverishness, I have generally seen, go together.

In conclusion, I would say, with Mr. Pope, *Magna est veritas, et prevalebit*.

I am, etc.,

GRAILY HEWITT.

Berkeley Square, Sept. 27th, 1864.



## SCARLATINOID DISEASE AFTER OPERATIONS.

LETTER FROM JAMES EDMUNDS, M.D.

SIR.—The following case bears upon an interesting question now under discussion in your columns.

Some years ago, I was consulted by a young gentleman in respect to several enlarged glands beneath the jaw, which, being very unsightly, he was anxious to get rid of. I told him that the only cure of which I knew was extirpation with the knife, and that this was so hazardous an operation, that he had better put up with the inconvenience. After, however, having undergone various treatment by other practitioners, he returned to me, and requested that I would remove them, and I did so.

In performing the operation, an angular flap of the integuments was raised, and the glands, having been dragged forward with a vulsellin, were completely extirpated, and the integuments then brought accurately together.

A day or two afterwards, the patient had bad sore-throat, and a rash so indistinguishable from that of scarlet-fever, that I ascribed his alarming condition to the fact of his having had scarlet-fever about him at the time when the operation was performed; and I ought to say that the sore-throat was no mere local sympathy with the part operated upon, but such as could not be distinguished from that of scarlet-fever of a severe but not malignant type.

Fortunately, the case did well, and the deformity was perfectly cured; no trace thereof remaining, except a linear scar beneath the jaw, which could only be seen on careful inspection.

On thinking over this case in connection with the letter from Dr. Wilks, I am now disposed to think that the scarlatinoid disease which followed the operation was the result of the absorption of septic matter by the open mouths of those lymphatic vessels which had been divided; and this explanation will also account for the other cases, although in them the scarlatinoid disease was less profound, because the amount of injury to the lymphatics was less extensive.

If the explanation which I have suggested should be accepted by the profession as the true cause of symptoms which, in some cases, are dangerous to life, and which, in all cases, must, more or less, contaminate the blood, and jeopardise the healing powers; it must take rank as a specific reason for carefully avoiding the lymphatic vessels in all operative proceedings; although, as far as I know, this point has not hitherto been specifically insisted upon, and it is certainly the usual practice almost to ignore the course of the lymphatics in determining the course of many surgical incisions.

Mr. Henry Lee, in his papers in the JOURNAL upon Syphilis, has very clearly pointed out the difference between absorptions of noxious matters by the veins and absorption of the same matters by the lymphatics. In the one case, we get complete systemic infection; but, in the other, the noxious matters are, as it were, digested; or, at any rate, are modified by the vital powers of the lymphatic system; so that we do not get the same results as when these matters have gained direct access to the blood by mere osmosis into the veins. So it may be in surgical operations; septic matters may enter directly into the blood through the open mouths of veins, and produce that train of results which we call pyæmia; or septic matters may enter the open mouths of the divided lymphatics, and may be more or less modified in the lymphatic system, so as to produce: 1, mere local irritation or abscess in the course of the vessels and glands; 2, rheumatoid disease; 3, more serious

results, in the shape of eruptive fever, or of vital prostration and malignant poisoning.

A report by myself of a remarkable case, called, for want of a better name, "Malignant Pustule", which bears upon this question, will be found in the *Medical Times and Gazette* of last year.

I am, etc.,

JAMES EDMUNDS.

Oct. 10, 1864.

## IS SIMPLE ACUTE ERYSIPELAS A LOCAL OR A CONSTITUTIONAL DISEASE?

LETTER FROM JOHN HIGGINBOTTOM, ESQ., F.R.S.

SIR,—The following queries I proposed to the profession in March 1853, at a meeting of the Provincial Medical Association; to which I have had no response. As it is still a question in which I have much interest, I should be grateful to any of my professional brethren who would favour me with an opinion.

1. Is simple acute erysipelas a purely local, or a constitutional disease?

2. Is it sometimes a local, and sometimes a constitutional disease?

3. Is it simultaneously both a local and constitutional disease?

In addition to the above queries, I should like to ask, Why erysipelas is classed among the exanthemata?

I am, etc.,

JOHN HIGGINBOTTOM.

Nottingham, Oct. 10th, 1864.

## Medical News.

APOTHECARIES' HALL. On October 7th, the following Licentiates were admitted:—

Bell, Cyril William Bowdler, Valetta, Malta  
Davies, Herbert, University College Hospital  
Dodd, Edward, North Stoke, Oxfordshire  
Fairbank, Thomas, Ishington  
Powell, John, Chichester, Sussex  
Power, William Henry, St. Bartholomew's Hospital  
Smallman, Joseph Clement Bruce, Wiltshire, Gloucestershire

At the same Court, the following passed the first examination:—

Cass, William Cunningham, University College  
Gill, George, Liverpool Royal Infirmary  
Hoffmeister, William, University College  
Tindall, Alexander M'Ivor, St. Bartholomew's Hospital

## APPOINTMENTS.

## ARMY.

GROGAR, Surgeon J., M.B., 4th Dragoon Guards, to be Surgeon-Major, having completed twenty years' full-pay service.  
SROCK, Staff-Assistant-Surgeon J. N., to be Assistant-Surgeon 9th Foot.  
WRIGHT, T. W., Esq., to be Staff-Assistant-Surgeon.

## ROYAL NAVY.

BAYNES, Wm. W., Esq., to be Staff Surgeon of Woolwich Dockyard.  
BELLAMY, Arthur F., Esq., Assistant-Surgeon, to the *Duke of Wellington*.  
JAMESON, Hugh, Esq., to be Retired Deputy-Inspector-General of Hospitals and Fleets.  
MACDONALD, John D., Esq., Surgeon additional, to the *Victory*, for service at Haslar Hospital.  
MILNARY, Charles P., Esq., Assistant-Surgeon, to the *Thetis*.  
PERRY, Frederick, Esq., Assistant-Surgeon, to the Portsmouth Division of Royal Marines.  
RICH, John W., M.D., Surgeon to the *F. 7000*.  
TORMANCE, John B., Esq., Assistant-Surgeon to the *Thetis*.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

COLEMAN, W., Esq., to be Surgeon 10th Kent R.V.  
GILL, H. K., Esq., to be Assistant-Surgeon 5th Argyll and Antrim Brigade Farnham A.V.  
GRIFFITH, A. L., M.D., to be Assistant-Surgeon 10th Westshire R.V.  
LANSBOW, F. P., Esq., to be Surgeon 1st Administrative Brigade Gloucestershire A.V.

REED, J. M., M.D., to be Assistant-Surgeon and Administrative Brigade Leicestershire A.V.  
 WILLIAMS, E., M.D., to be Surgeon 1st Gloucestershire A.V.

## MARRIAGE.

WALWICH, the Rev. J. C. B. W., late Curate of St. Peter's, Northampton, to Marian, second daughter of J. L. M. BRYAN, M.D., Northampton, on October 14.

## DEATHS.

FANNISTER. On October 2nd, at 143, Oxford Street, Elizabeth, M. A. L., wife of J. Henry Fannister, Esq., Surgeon.  
 BOWLING. On September 27th, aged 8, Henry Fraser, youngest son of the late J. Pierce Bowling, Esq., Assistant-Surgeon Royal Army.  
 BROWN. On October 15th, at Belkirk Villas, Ishington, the wife of Augustus Brown, M.D.  
 CASS, William Leonard, Esq., Surgeon, at Gole, Yorkshire, aged 41, on September 23.  
 GALT, John, M.D., Deputy Inspector of Fleets and Hospitals, at Rembrandt, on September 11.  
 HARRIS, Edward, M.D., late of Bath, at Bayswater, aged 41, on October 2.  
 JEFFREY, Joseph, Esq., Surgeon, at 11, Trinity Terrace, on Sept. 17.  
 LOVELL, C. H., M.D., at Tottenham, aged 74, on October 5.  
 REED, George, Esq., of 15, Sussex Gardens, Hyde Park, at Madras, on October 1.  
 ROSE, Richard, M.D., at Humberstone, Leicestershire, aged 71, on October 5.  
 ROSE. On October 1st, at Hampstead, aged 11 months, the infant son of M. Cooper Rose, M.D.  
 SALMON, Richard F., Esq., Surgeon, at Bayswater, aged 52, on October 2.  
 WALWICH, Charles A., M.D., at Newport, Isle of Wight, aged 41, on October 1.  
 WHEAT, Alexander, Esq., Surgeon, late of Norton, near Sheffield, at Lorena, Texas, on June 28.

**DEATH OF HEURTELoup.** The journals announce the death of Baron Heurtelet, of lithotriptic fame.

**DR. SIEVEKING,** we understand, returns from Denmark to Balmoral in charge of the young Prince, and has probably already arrived in Scotland.

**ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.** Dr. Druitt has been elected President of the Metropolitan Association of Medical Officers of Health for the ensuing year.

**A RARE BIRD.** A splendid specimen of the goshawk, strong and robust in frame, and of exceedingly fine plumage, was lately shot on Filey Brigg. The Rev. F. O. Morris, B.A., in his *History of British Birds*, says: "In Yorkshire, the only occurrence of this bird on record was at Cusworth, near Doncaster, where one was killed in the year 1825."

**BENEVOLENCE.** On the recent opening, at University College Hospital, of the contribution-boxes at the doors of the hospital, there was found a sum of £78 odd, in bank notes and all the various coins of the realm from pounds to farthings; among them were four distinct gifts, one of £25, two of £5 each, and one of £2:10.

**AMERICAN ARMY MEDICAL SERVICE.** Never was the medical student stimulated by so many incitements to perfect himself in his profession. Our navy, rapidly expanding, is in such need of educated surgeons, that promotion to the highest rank occurs in the second year. The army has absorbed thousands, and still calls for more. But the army and navy will have only the best. (*American Medical Times*.)

**SCIENCE FOR THE PEOPLE.** The Minister of Public Instruction has addressed a circular to the rectors of provincial academies of the French University, suggesting the propriety of establishing, in the large towns of their respective circumscriptions, popular lectures, like those given last winter with so much success at the Sorbonne in Paris. The experiment has already been tried at Lisle by the professors of Douai, and at Marseilles by those of Aix, in both cases with most beneficial results.

**ALCOHOLIC DRINKING.** Dr. Decaisne sums up the evils proceeding from the abuse of spirits as follows: Increase of crime and suicide, hereditary transmission of the passion for drink, and of other deplorable tendencies, hereditary origin of epilepsy, idiocy, scrofula, and many other maladies, although the parents may have been free from them, weakening of the reproductive powers, the depopulation of certain countries, and, as a consequence, their misery. Dr. Ruiz, who has practised medicine in the Antilles, attributes three-fourths of the premature deaths among the negroes to the abuse of tafia.

**CHLOROFORMISATION.** An United States army-surgeon speaks as follows of the use of chloroform: "I may allude to the lavish use of chloroform in army practice. It is almost invariably given in every operation, and oftentimes by hospital attendants or other non-professional persons, and with scarcely ever a bad effect. Until the recent battle of Cold Harbour, I do not remember to have seen a death in which there was a suspicion that the anæsthetic had hastened the fatal issue, or produced it; and in the case alluded to it was more than doubtful whether the chloroform had any agency in producing the patient's death. This immunity from bad effects in the administration of chloroform in field service, is due, probably, more than anything else, to the fact that, given, as it most generally is, in the open air, there is an ample supply of atmospheric air mixed with the lethean vapour."

**DR. CHARLES MACLEAN,** late Inspector-General of Military Hospitals, died on the 4th inst., at Rathmines, at the advanced age of 74 years, after a painful and protracted illness. This excellent surgeon entered the service in 1809, as hospital mate, in which rank he served at Walcheren. In the following year, he landed in the Peninsula, and was promoted to the assistant-surgery of the 2nd Battalion 53 Regiment. He was present at the battle of Busaco; served at Torres Vedras, Salamanca, Vittoria, and the Pyrenees (July 30th, 1813); also at the crossing of the Bidassoa, Nivelle, and Toulouse. For these eminent services he was awarded the War Medal, with seven clasps. In July 1814, he embarked with his battalion for St. Helena. Dr. Maclean officiated as physician to the first Napoleon during his exile at St. Helena. When quartered at Jamaica (1849-52), the special thanks of His Grace the Duke of Wellington were conveyed to him for his sanitary measures during an outbreak of cholera in that island. (*Irish Times and Dublin Medical Press*.)

**DEATHS IN LONDON DURING THE QUARTER.** 18,000 persons died in London during the quarter which ended on Saturday, October 1st. Diarrhoea caused the greatest mortality in the zymotic class, 2,080 persons dying from this disease. Cholera was fatal to 130 persons, the majority being children. Small-pox caused 140 deaths—a number which, although large, contrasts favourably with that in the corresponding quarter of 1863, when 512 lives were lost by this scourge of the human race. Measles, on the contrary, exhibits a large increase, causing 855 deaths. Typhus carried off 980 persons, and visited with much severity the East and South districts of the metropolis. Phthisis destroyed 1,933 lives. Other diseases of the respiratory organs proved fatal in 1,699 cases. From diseases of the brain and nervous system 1,734 persons died; diseases of this character show a gradual and steady increase. Five hundred and twenty-seven persons lost their lives during the quarter from accidents of various kinds; 264 of these were killed by fractures and contusions, 49 by burns or scalds, 13 died from the effects of poisons, 84 were drowned, and 66 were suffocated. Sixty-three persons committed suicide.



**MEDICAL OFFICERS OF HEALTH.** The Annual Reports of our Officers of Health bear ample proof of the great benefits to society which have accrued from the appointment of these gentlemen. Dr. Lankester, in his Eighth Annual Report to the vestry of St. James's, quotes the words of the Registrar-General on this head. "In the census of 1861" (says Dr. Lankester), "I am returned as one of forty-seven health-officers who exist in the United Kingdom. The Registrar observes: 'This is a new medical office. Hitherto the medical skill of the country has been usefully employed in the treatment of the rich; but the means of life-preservation was neglected, and was rarely applied practically, because it formed no part of the business of the medical profession. The health-officers, few in number, have already done incalculable good, and the local government of no community is complete without them. The conditions on which health depends are so various as to require for their regulation the highest order of medical education and talent.'" We find, from Dr. Lankester's Report, that, under his vigorous inspectorship, all the cow-houses of the parish have been closed, in consequence of their owners having broken the laws laid down for their guidance.

**ROYAL COLLEGE OF SURGEONS.** The annual report of the receipts and expenditure of the College has just been published, from which it appears that the former amounted to £13,806:14:8, being an increase of £1396:13:8 over the preceding year. The principal source of revenue is derived from the preliminary, primary, and pass examinations for the diploma of membership, which collectively produced £10,331:5. The certificates of qualification in dental surgery realised £924; the fees derived from the fellowship amounted to £377:10; rent, £702:15:6. The disbursements amounted to £12,844:13:3, or only £425:16:2 more than last year. The College department is put down as absorbing the largest amount, viz., £7798:17:1, including fees to Council Courts of Examiners, diploma stamps (£1 each), list of members, coal, salaries, wages, and law expenses. The Museum department costs £2264:13:8, for catalogues, specimens, spirit, bottles, salaries, and wages; and the Library department, for the purchase and binding of books, salaries, etc., is put down at the moderate sum of £601:18. The annual list of Fellows, Members, etc., has just appeared, from which it seems that the total number of Fellows, in whose hands the elections into the Council are vested, amount to 1296, of which number 300 write "exam." after their names. The Licentiates in Midwifery number 926. There appears a great increase over last year in the number of dentists, who are now 280 strong. The gentlemen who obtained the diploma of membership are on the increase, as evidenced in the receipts above mentioned.

**MILITARY PRISONS.** The annual report on the military prisons in the United Kingdom, by Lieut.-Colonel Henderson, the successor of Sir J. Jebb as Inspector-General, has just been issued. The new scale of dietary is described as proving sufficient to maintain the men in good health, capable of performing the labour required of them, and of rejoining their regiments in a condition at once to undertake their ordinary duties. The improved scale has considerably diminished the average loss of weight, and the number of prisoners treated for sickness in the past year has been proportionately less than in any year since 1851. The fact that the prisoners confined in the military prisons are far more healthy than their comrades in garrison furnishes an additional proof, if one were necessary, of the loss of health, besides other evils attendant on the irregu-

larities of a soldier's life, most of which have their origin in facilities afforded them for obtaining intoxicating liquors, and point to subjects in which improvement is much needed.

**THE LATE DR. DUNDAS THOMSON.** At a late meeting of the Metropolitan Association of Medical Officers of Health, the following resolution was passed: "That the members of this Association deeply lament the loss they have sustained by the decease of its late President, Dr. Dundas Thomson, F.R.S. To the late Dr. Dundas Thomson, the medical officers are not only greatly indebted for the zeal and energy he constantly manifested in the promotion of the interests of the Association; but especially so for the kind services he liberally afforded them by throwing open to their use at all times his valuable chemical laboratory, and for his personal assistance so freely given to them in their investigations. The Association are desirous of recording an expression of the esteem and respect they felt towards him, and also the opinion they entertained of the very able, efficient, and courteous manner in which he discharged the duties of President during the whole time he held that office. That a copy of this resolution be forwarded to Mrs. Thomson, signed by the chairman. Resolved, also, that the meeting do convey to Mrs. Thomson an expression of its heartfelt sympathy with her, in this hour of her affliction, in the irreparable loss she has sustained in the premature death of her late husband."

**OZONE-REGISTRATION.** Dr. Kemp says: "Considering ozone as oxygen in a dynamical condition, and knowing that it is capable of converting sulphuretted hydrogen and other deleterious gases into innocuous compounds, the principal object of registration is to ascertain under what circumstances it is redundant, how far in peculiar localities it is utilised, and to what extent, when totally absent, the public health suffers from the deficiency. Daily observations are now making in at least three stations in the neighbourhood of Hereford; and, although only about half a mile asunder, the difference in the amount of ozone is most remarkable. In a paper on this subject, read before the British Association at its recent meeting, I have, for reasons therein stated, proposed to substitute dextrine for starch in the test-papers, the advantage of which has since been fully confirmed."

**ANATOMY IN THE EAST.** In the last general report on public instruction in the Lower Provinces of the Bengal Presidency, which has just reached England, Dr. Norman Chevers, the Principal of the Medical College, states that the number of bodies dissected during the year amounted to 1,112—an extraordinary fact, when it is considered that, only a few years ago, a native gentleman lost caste by touching a dead body. The total number of in- and out-door patients who received relief at the hospital and in its dispensaries during the year amounted to 30,700, exclusive of the very large number treated in the Eye Infirmary. In the European general wards, there occurred 184 deaths, or 9.69 to the treated; in the native wards, there were 634 deaths, being 28.33 per cent. to the treated. Dr. Chevers concludes his interesting report by stating that in March last his Highness the Maharajah of Jyepore, a native prince of great enlightenment, who is very earnest in advancing medical education in his own State, after having visited the College, was so pleased with it, that he munificently presented the sum of 1,000 rupees, "to be devoted to the improvement of the institution may determine."

## OPERATION DAYS AT THE HOSPITALS.

|               |  |
|---------------|--|
| MONDAY.....   | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  |
| TUESDAY. .... | Gur's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| WEDNESDAY...  | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.   |
| THURSDAY....  | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| FRIDAY.....   | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY....  | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

|            |  |
|------------|--|
| MONDAY.    | Medical Society of London, 8 P.M. General Introductory Address, by the President.  |
| TUESDAY.   | Pathological Society of London.  |
| WEDNESDAY. | Junior Medical Society of London, 8 P.M. (University College.) Mr. Ch. E. Orme, "On the History and Nature of Wasting Palsy."  |
| THURSDAY.  | Harveian Society of London, 8 P.M. Mr. W. Adams, "On Possible Extension in Cases of Partial Anchylosis of Siff Joint."   |
| FRIDAY.    | Western Medical and Surgical Society, 8 P.M. Mr. G. Pollock (President), "On the Relative Advantages of Puncturing the Bladder by the Rectum and Perineal Section, for the Treatment of Impervious Stricture." |

## TO CORRESPONDENTS

\* \* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

A CORRESPONDENT SAYS:—"I have been amused at the growlings of the *Lancet*. I fear, from the clumsy and ill-disguised writing, the instrument has got rusty, and won't cut."

DOSE OF OIL OF MALE-FERN.—SIR: Will you kindly let me know the dose for an adult of the oil of male-fern, as there is a great discrepancy in the doses ordered by some of your correspondents; one of whom recommends heroically two drachms; whilst Neligan, in his work on *Materia Medica*, gives but twenty drops.

I am, etc.,  
H. ALCOCK,  
Medical Officer, Kilnaleck Dispensary, Cavan Union.  
Kilnaleck, co. Cavan, Ireland, October 5th, 1864.

[The dose of oil of male-fern is from twenty minims to a fluid-drachm for an adult. The great point in the administration of the remedy is to give it on an empty stomach. EDITOR.]

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have further received on behalf of the above Fund:—J. T. SACARY, Esq. (Wendover), 5s.; W. E. PORTER, Esq. (Lindfield), 5s.; J. F. MARTIN, Esq. (Abingdon), £1:1; P. LA FARGUE, Esq. (Meriden), £1; J. J. CLAPCOT, Esq. (Deamster), £1:1; Dr. W. H. COLBORNE (Chippenhams), £1:1; H. B. SMITH, Esq. (Battle), 5s.; J. PRANKER, Esq. (Langport), 10s.; Messrs. FIRTH and FERNIE (Macclesfield), 10s. 6d.; Dr. W. OGLE (Derby), 10s. 6d.; Dr. HULME (Wigston Magna, near Leicester), 10s.; Dr. BARNES (Finsbury Square), £1:1; D. DORNING, Esq. (Barton-on-Irwell), £1; R. ROE, Esq. (Barton-on-Irwell), £1; J. L. FLETCHER, Esq. (Reelee), 10s.; G. CALDER, Esq. (Hailsham), 5s.; J. E. CLOUTING, Esq. (Shipham), 10s.; A. C. SHOUT, Esq. (Petworth), 10s.; J. WILLS, Esq. (Sturminster), 10s.; Medical Officers of Leek Union, 10s. 6d.

Amount previously announced, £67:13:6. Received at the *Lancet* office, £4:12.

I am, etc.,

ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.

115, Fishergate Street Without, October 12th, 1864.

THE SOCIAL SCIENCE REVIEW of the present month is mainly occupied with a good summary of the chief proceedings of what the *Review* calls "the British Parliament of Science", which last month assembled at Bath.

THE JOURNAL OF MENTAL SCIENCE for October contains an article on the Moral Treatment of the Insane, by Mr. Commissioner Browne; the address of Dr. Morel, read at the annual meeting of the Association of Medical Officers, etc.; Suggestions for a Cottage Asylum, by Mr. Toller; a Lecture by Professor Laycock, on the Legal Doctrine of the Responsibility of the Insane, and its Consequences; Remarks on the Refusal of Food in the Insane, by Dr. S. W. D. Williams; and Clinical Notes on the Atrophy of the Brain, by Dr. Wilks. An interesting Report on Foreign Psychological Literature is given by Dr. Arlidge.

THE OPHTHALMIC REVIEW (No. III) is still mainly the Expositor of Foreign Ophthalmological Proceedings. The chief papers in it are Translations from the German School. In this way are given a Clinical Lecture by Von Gräfe, on Cases of Paralysis of the Oculo-motorius; and a Clinical Lecture by the same celebrated man, on Cataract. Dr. Magawly of St. Petersburg gives in translation a Contribution to the Clinical History of Glaucoma. These papers, with a good retrospect by Mr. Windsor, form the prominent features of the journal.

CHLOROFORM.—SIR: An absurd romance on chloroform is now going the round of Europe, copied out of one of our leading magazines. A most excellent lady—a Lady Bountiful, rich and religious, with enormous property—falls sick, and has a tumour to be removed. A "spiritualist", some such as those dreary people now in vogue in London, advises, from some suspicion of the "faculty" and clairvoyance, that chloroform be on no account used, as it is tempting Providence to abolish a natural agent, "pain". Two surgeons come to do the operation: one is in favour of chloroform (let us call him Mr. X. Y. Z.), the other is careless about it; but, during the operation, the Lady Bountiful dies of the chloroform. Standard medical weeklies are quoted to condemn chloroform; but these weeklies are so dishonest, and given up to trade themselves, that even now the story is encouraged, and not one word in favour of chloroform permitted to appear in their columns. It is against medical etiquette! Professor Simpson and all the best men of Guy's agree with me, that this story is a foul libel on the profession and on chloroformists. But this poor titled lady has an inquest; and that is supposed to cover a multitude of sins. The doctors are dreadfully blamed in the verdict. The climax of the tale is reached; when churches are to be built, parsonages endowed, ragged schools got up with the expected money in the "will" of the lady; but the spiritualist knows something more; and when the will is opened, the enormous fortune goes to Mr. X. Y. Z., who, of course, knows what he was doing in giving the chloroform! The story is in a wretched thing called *Good Words*. Every one should denounce it. I am, etc.,

Sackville Street, October 3rd, 1864.

C. K.

COMMUNICATIONS have been received from:—MR. RICHARD GRIFFIN; DR. ROUTH; THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; MR. H. ALCOCK; MR. HIGGINBOTTOM; DR. E. CRISP; DR. EDMUNDS; MR. D. KENT JONES; MR. C. H. ROPER; THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY; MR. T. M. EVANS; MR. F. J. GANT; DR. GRAILY HEWITT; DR. C. HARRISON; DR. R. FOWLER; THE HONORARY SECRETARY OF THE JUNIOR MEDICAL SOCIETY; DR. FREDERICK J. BROWN; DR. JAMES PATERSON; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; MR. J. VOSE SOLOMON; and MR. T. SPENCER WELLS.

## BOOKS RECEIVED.

1. A Manual of Diet and Regimen. By H. Dobell, M.D. Second Edition. London: 1864.
2. Amputation at the Hip-Joint. By J. Fayrer, M.D. Calcutta: 1864.
3. Eighth Annual Report made to the Vestry of St. James's, Westminster, for the year 1863. By E. Lancaster, M.D., F.R.S. London: 1864.
4. Essays and Reviews on Affections of the Nervous System. By W. Camps, M.D. London: 1864.
5. Archives of Dentistry. No. II. London: 1864.
6. Guy's Hospital Reports. Third Series. Vol. X. London: 1864.
7. The Journal of British Ophthalmology. No. 1. London: 1864.
8. A Manual of Practical Hygiene. By E. A. Parkes, M.D., F.R.S. London: 1864.
9. Hints on the Philosophy of Education. By H. Sandwith, M.D. London and Hull: 1864.
10. The Hygiene of the Army in India. By Stewart Clark. London: 1864.
11. Lectures on Public Health. By E. D. Mapother, M.D. Dublin and London: 1864.



# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[HELD in CANNIBALIA, AUGUST 3rd, 4th, and 5th, 1864.]

### DIPHTHERIA: WITH NOTES OF THE POST MORTEM APPEARANCES IN TWENTY- FOUR CASES.

By JOHN BRIDGER, Esq., Cottenham, Cambridgeshire.

It is with feelings of great diffidence that I rise before such an assembly, to make a statement of some few facts which have occurred in an epidemic of the disease called diphtheria, as presented to my notice within the past three years. Our worthy President, Dr. Paget, having seen several of the cases, requested me to take notes, and bring the results before the members of this Association. It is, therefore, on these grounds that I take the liberty of trespassing on your valuable time.

Since April 1862, upwards of 3,000 cases have fallen under my care. At the onset of the epidemic, the disease was of a more acute character than at the present time; cases then presenting the characteristic appearances so well known to the profession, and so ably described by Dr. W. H. Ranking in a lecture at the Norwich Hospital (*Lancet*, January 8th, 1859). Latterly, most of the cases have been of a milder character; very many of them relapses. The sequelæ are often very serious; such as pleurisy, pleuropneumonia, endocarditis, peritonitis, croup, paralysis; in one case, abscesses of the liver; in one, gangrene of the lung; some have passed membrane from the bowel; in one case from the bladder. Erysipelas has very frequently followed; sometimes commencing at the nostrils and spreading over the face and head; sometimes from one or both ears, and spreading over the head and face; in a few cases from the anus, umbilicus, penis, or vagina, and extending slowly over the whole body and lower extremities. In the three last mentioned points of commencement, it has occurred in infants, who took the disease from their mothers, and shewed signs of it, either at birth, or within a few days.

Women who have the disease previously to or during pregnancy, have their condition modified by it. In some it produces abortion; in some, premature confinement; and in others, hæmorrhage or lingering labour; whilst in all puerperal women, for a period of from three to six weeks after delivery, and occurring every few days, there is a discharge of shreddy membranous or glairy matter like uncoagulated white of egg. This has taken place in fifty-two cases; my attention being generally called to it by the patient or nurse as something unusual. The children born of parents affected with diphtheria, invariably shew signs of it soon after birth. If you look into their throats you see the tonsils, uvula, and soft palate swollen and red, perhaps slightly cedematous, producing slight hoarseness and cough. This may go on for some days, or even weeks, the child seeming neither well nor ill; when all at once it is taken worse, screams out with pain, and dies in a few minutes. Whenever I have been able to examine the body, I have found that death has been caused by effusion into the peri-

cardium. Altogether, out of this number of cases where diphtheria has been the primary cause, there have been seventy-five deaths; twelve were complicated with scarlet-fever; nine with measles; one with confinement and scarlet fever together; one with confinement alone (primipara.)

A young woman, aged 21, gave birth to an acephalous child. She was doing well up to the twelfth day, when she complained of her throat. The tonsils, soft palate, and uvula looked red only. In about twenty-four hours she complained of a kicking sensation in the throat, screamed out, and died. No post mortem examination was allowed.

I have made twenty-four post mortem examinations, the notes of which are appended to this paper.

I wish particularly to bring before the notice of the members of this Association a certain condition of the auriculo-ventricular valves of the heart, seen in every case where an examination was allowed, whether complicated with any other disease or not, and to the best of my belief, not previously made known to the profession.

It is a roughened, reddened, thickened appearance of the valve; as if by interstitial deposit, situated midway between the insertion around the ventricular opening and its attachment to the chordæ tendinæ; one or both valves being affected, more or less, according to the severity of the case, and the time elapsing between the symptoms of heart-affection and death.

The symptoms denoting this affection of the heart may come on early or late; generally late, several cases having occurred where, to all appearances, the patient has been well. It is ushered in and may be diagnosed by the following symptoms: an anxious countenance; hurried respiration; a rapid pulse, from 120 to 170; tenderness over the præcordial region; scarcely any pain, excepting on pressure. In four cases, there was a slight murmur at the apex of the heart; in two of these it subsided in a week; in one, remained permanent for some months; and one case is now under treatment. The duration of the urgent symptoms varies from three to seven days.

I have not noted the exact number of cases in which the heart has been so affected, but can say in at least a hundred; and in some the affection came on so severely, that the symptoms were more like collapse with cold clammy perspirations, and requiring the immediate administration of diffusible stimulants, very frequently repeated, every ten, fifteen, or twenty minutes. I also apply flying sinapisms more or less frequently, as required; repeating them at least twice daily, until the pulse subsides, and the tenderness on pressure has gone off. I also give internally, the steel mixture with nitrate of potass every one, two, or three hours; a small dose of grey powder and compound ipecacuanha powder at bedtime every night. I also give in addition, to those cases with a *bruit* and accompanied by pain, three grains of the extract of conium every four or six hours in a pill, until the pain subsides.

In respect to the treatment generally pursued, I rely principally on the tincture of sesquichloride of iron, but combine with it the acetate of ammonia and spirits of nitrous ether, in order to keep the skin and kidneys active. When there are glandular enlargements, I add to these the iodide of potassium; and should there be also an cedematous condition, together with glandular enlargements, both the iodide of potassium and the chlorate of potass. If the tongue be much loaded, and the patient feel at all sick, I generally give a stimulating emetic of equal parts of sulphate of zinc and ipecacuan; and throughout the active stage of the disease, an alterative dose of calomel or grey powder combined with the compound

ipecacuan every night at bedtime. I apply emollients or stimulating fomentations to the throat externally, dissolving the patient to gargle with warm water or weak vinegar and water frequently; unless there be very much fetor, then I substitute a weak solution of chlorinated soda. The forcible removal of membrane and the application of acids or caustic are, I think, quite useless; in fact, I believe they are injurious, producing shock, and afterwards greater depression. Perfect rest and quiet are necessary. Beef-tea and stimulants (either brandy or wine, as best suited to the case) are given; and when indications of approaching paralysis shew themselves, I add to the steel mixture small doses of the solution of strychnine; thus, I believe, in very many cases obtaining a more rapid convalescence than can be obtained by any other tonic, such as quinine, bark, and the mineral acids, all of which I have tried. Acids, I find, are not generally tolerated.

In some special cases, where there is a large amount of semi-fluid fetid discharge from the mouth and nostrils, the solution of chlorine (made by adding dilute hydrochloric acid to the chlorate of potass) in combination with steel, and given every two or three hours, I have found to act almost magically in checking this discharge, and producing a rapid convalescence.

I find generally, that for young children, the chlorate of potass with steel is not only the most pleasant, but the best remedy; bringing back the colour to the lips and cheeks sooner than anything else.

In cases of croup, I give a grain of calomel and two grains of ipecacuan as a mild emetic every two, three, or four hours; and during the intervals, the steel mixture with nitrate of potass, and small doses of chloroform; applying externally to the throat and chest, fomentations of hot mustard and water. The calomel and ipecacuan are discontinued as soon as the urgent symptoms pass off; but the steel is continued, with chlorate instead of nitrate of potass.

Dr. Paget saw one of these croupal cases; the child died; and after death, I sent the larynx and heart for his inspection. Of eight similar cases, five died and three recovered. They all simulated spasmodic croup with patches of membrane on the tonsils only, and yellow pultaceous looking matter lining the top of the trachea for about an inch.

In all cases where membrane extended down the trachea into the lesser bronchi, death followed rapidly. One patient, a lad aged 14, died suddenly in going from the bed to the night stool, apparently from paralysis of the heart. He was previously doing well, and going about the house, until his mother gave him a dose of castor-oil contrary to my wishes. I have found change of air to be absolutely necessary in some cases—beneficial to all. Cottenham being situated on the border of the Fens, our atmosphere is of a depressing character, consequently those persons who come from a higher elevation and a more bracing atmosphere to reside in this neighbourhood generally take the disease. On several occasions, when there has been a batch of fresh cases, those already ill have been taken worse, on a particular day and hour, and in a particular direction, as if caused by a wave passing over in this direction from village to village.

I do not pretend to know or assign the causes of origin of this disease; but I believe, with many others, that it is a disease affecting the whole body through the medium of the circulation, and always producing affections of an asthenic character. Where it attacks persons of a tubercular diathesis, if not immediately fatal, it lights up the tubercular disease, and hurries them rapidly on to a fatal termination, where probably they might otherwise have lived for years.

#### Notes of Post Mortem Examination in Twenty-four Cases of Diphtheria.

CASE I. *Diphtheria, Fourteen Days: Exhaustion.* I was sent for to see L. C., aged 11, female, of Histon, on April 6th, 1862. On arrival at 8 p.m., I found she had been dead half an hour. Her mother stated she had been ill with a bad throat a fortnight. A *post mortem* examination was made by the coroner's order, thirty-six hours after death.

The body was very pale, but well nourished. The head was not opened. *Throat.* The mucous membrane of the mouth, tongue, soft palate, uvula, and pharynx, were very pale. The tonsils were enlarged; no abrasion or ulceration. On opening the larynx, I found a small piece of diphtheritic membrane lying loose between the chords vocales. The mucous membrane lining the trachea and bronchi was very pale. The lower lobes of both lungs were congested; otherwise healthy. In the heart, the muscular fibres were pale; the right auricle and ventricle were half full of uncoagulated blood; the left auricle and ventricle empty. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened by interstitial deposit. The other organs were normal. Three other children afterwards died in this same family.

CASE II. *Diphtheria, Ten Days: Croup Four Days.* R. N., aged 7 months, male, had been ill ten days. The disease commenced like a cold with hoarseness. The tonsils, soft palate, and uvula, looked red only. In the last four days he had symptoms very like laryngismus stridulus, with numerous fits of dyspnoea, in one of which he died, on April 12th, 1862. He was also teething at the same time. No membrane was seen throughout the progress of the case.

POST MORTEM EXAMINATION, twelve hours after death. I was not allowed to open head. The body was well nourished. The mucous membrane of the throat and larynx was pale and soft, for about an inch beneath the vocal cords; a little creamy looking matter lined the larynx and trachea. The lungs were congested, especially the lower lobes; otherwise healthy. The auriculo-ventricular valves of the heart on both sides were roughened, reddened, and thickened; mostly on the right. The right auricle was nearly filled with a fibrinous clot, extending into the ventricle. Semi-coagulated blood was found in the left ventricle. The kidneys were congested.

CASE III. *Diphtheria, Four Days.* H. T., aged 6, female. Her illness commenced with the formation of a membrane on the tonsils, spreading over the fauces and pharynx. The second day it extended down into the larynx, trachea, and bronchi. She died on the fourth day, April 28th, 1862.

POST MORTEM EXAMINATION, twenty-four hours after death. The head was not opened. The body was well nourished. *Throat.* There was no membrane above the larynx. The tonsils were enlarged and hardened. On opening the larynx and trachea, I found a membrane lying loose, and extending from just beneath the vocal cords down the trachea into the bronchi. A semi-purulent opaque matter filled up the lesser tubes entirely. The lungs were congested; otherwise healthy. *Heart.* The right auricle and ventricle contained a mass of fibrine continuous from one to the other. There was uncoagulated blood in both auricles and ventricles. The auriculo-ventricular valves were roughened, reddened, and thickened on both sides. The kidneys were congested.

CASE IV. *Diphtheria, Twelve Days: Paralysis of the Heart.* T. P., aged 14, male; was taken ill on June 13th, 1863. There was a membrane on the tonsils, soft palate, uvula, and pharynx; it extended up the back of the soft palate, blocking up the posterior



nares. This patient was going on well towards recovery up to June 25th, when his mother gave him a table-spoonful of castor oil (contrary to my wishes.) He died on going from the bed to the night-stool in a fainting fit, the oil having acted three times.

POST MORTEM EXAMINATION, thirty-six hours after death. The *tonsils* were enlarged; there was no membrane. The *lungs* were slightly congested. *Heart*. The right auricle and ventricle were partially filled with uncoagulated blood. Both auriculo-ventricular valves were roughened and thickened; the redness had gone off. The *kidneys* were congested; the left was large and granular, and contained muco-purulent matter in its pelvis.

CASE V. *Diphtheria, Three Days: Effusion into Pericardium*. C. H., aged 4 months, male; had been poorly for three days previously, apparently with a cold and slight hoarseness. He was suddenly taken worse on November 19th, 1862. At 7 A.M., he screamed out with pain, and died in five minutes.

POST MORTEM EXAMINATION, made by the coroner's order, twenty-six hours after death. The *body* was well nourished. A few bloody points were observed on slicing the brain, and there was general venous congestion. *Lungs*. From sixteen to twenty apoplectic clots were scattered over the anterior and posterior surfaces of both lobes of the left lung, situated between the serous covering and parenchyma of the lung. When cut into, they were found to consist of partially coagulated dark blood, and were of about the size of mustard seeds. Both *lungs* were congested. *Heart*. The pericardium was distended with fluid slightly tinged with blood. The serous covering of the aorta within the pericardium was roughened and thickened, looking opaque. A vein between the serous covering and artery was plugged by dark clots of about the same size, and similar to those scattered over the surfaces of the left lung. Both auriculo-ventricular valves were slightly roughened, reddened, and thickened. The *kidneys* were congested.

Another infant of the same parents died the following year in a similar manner, but had membrane on the *tonsils* three days previously to death.

CASE VI. *Diphtheria, One Month: Peritonitis, etc.* W. M., aged 5 years, male; a delicate thin boy, had been ill a month, and was progressing favourably up to December 7th, 1862, when he complained of pain in the epigastrium. There was slight tenderness on pressure; respiration quick; he had slight cough; pulse 160, weak and fluttering; his countenance was pale and anxious. There was membrane on both *tonsils*. The tongue was clean; bowels open; urine free, pale, and acid. He had no heat of skin; there was considerable aphonia; no abnormal sounds of heart or lungs could be detected on percussion or auscultation. He continued much the same up to the 14th, when sickness supervened, which cleared the *tonsils* of membrane. He gradually got worse, effusion taking place into the abdomen and chest, and the urine becoming albuminous. He sank very quietly on the 16th at 10 A.M.

POST MORTEM EXAMINATION, seventy-four hours after death. The *body* was emaciated. Rigidity had gone off. The *head* was not opened. The *tonsils* were enlarged. The *chest* contained about four ounces of dark coloured serum on each side. There were slight agglutinations between the upper and lower lobes of both lungs, of recent lymph. The whole of the left lung was much congested. The *heart* was large and flabby. The right auricle and ventricle were gorged with semi-fluid and slightly coagulated fibrine. The left auricle and ventricle were partially filled also. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened. The aortic

valves were slightly thickened and rough, and their edges looked red. The *abdomen* contained two pints of serous fluid in the cavity. The mesenteric glands were large and injected. The *kidneys* were congested; there was muco-pus in the pelvis of right kidney.

CASE VII. *Diphtheria, Seven Days: Effusion into Pericardium*. A. W. P., aged 1 year, male; always a delicate sickly child; had about a week ago a cold, hoarseness, and short hacking cough, of which he seemed to get the better of until the day he died, January 6th, 1863, when he cried out in his mother's arms, turned dark in the face, and died in half an hour. Two hours previously he took food well, and cut a tooth three days prior to death.

POST MORTEM EXAMINATION, made by the coroner's order, twenty-four hours after death. *Head*. Numerous bloody points were observed on slicing the brain; and there was general venous congestion. About a drachm of clear fluid was found in each lateral ventricle. The *tonsils* were large; the mucous membrane pale. The *lungs* were slightly congested. *Heart*. The right auricle and ventricle were nearly empty; and there was very little blood in the left ventricle. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened; the left much more so than the right. The pericardium contained about six drachms of fluid. The *kidneys* were congested; the right contained a small phosphatic calculus. (This was hereditary; the father and grandfather suffered from stone).

CASE VIII. *Diphtheria, Twenty-two Days: Carcinoma of Liver, Two Years*. S. M., aged 67, male; had been ailing for about two years with pain in the body, sometimes accompanied by diarrhoea and vomiting. He had been unable to work during the last eight months. There was no particular swelling; but he had a very cachectic appearance. He complained on January 1st, 1863, of sore-throat, and great depression. The *tonsils*, uvula, and soft palate, were red only; there was no membrane. On January 20th, heart-symptoms came on; fluttering rapid pulse, 160; with extreme depression. He died on the 22nd.

POST MORTEM EXAMINATION, forty-eight hours after death. The *head* was not opened. The *body* was emaciated. The *lungs* were congested; there were old pleuritic adhesions. The *heart* contained clots of fibrine in both auricles, more especially in the right. Both auriculo-ventricular valves were roughened, reddened, and thickened; the left most. The *liver* weighed about seven pounds, and scattered throughout its substance were masses of soft medullary cancer, varying in size from a pea to a walnut. The *omentum* was a mass of hard cancer. The *kidneys* were congested; the right contained four small hard dark calculi in the pelvis.

CASE IX. *Diphtheria, Six Days*. S. U., aged 3 years, female; always a delicate child; complained of sore-throat, and had barking cough, on March 5th, 1863. I was sent for on the 8th. The uvula and soft palate presented the characteristic redness. The *tonsils* were enlarged; and there was a small patch of membrane on each. Great difficulty of breathing came on, on the 19th, at 6 P.M., with rapid fluttering pulse—scarcely countable—about 180; heat of skin and thirst; craving for cold water. Suspecting membrane in the trachea, I gave an emetic, but it had no effect; and she died on the 11th, at 6 A.M.

POST MORTEM EXAMINATION, twenty-four hours after death. The *head* was not opened. Both *lungs* were much congested. A membrane lined the trachea and great and small bronchial tubes. Below these, semi-purulent opaque matter filled up the lesser bronchi. The *heart* contained clots of fibrine on both sides. The auriculo-ventricular valves on both sides

were roughened, reddened, and thickened; the left most. The *liver* was congested.

CASE X. *Diphtheria, Seven Weeks: Pneumonia*. E. M., aged 64, female. She had considered herself an ailing woman for twenty years; had had this twenty years since, and was in the habit of taking a small quantity of opium daily. She had sore-throat and cough six weeks before. She was seen on March 21st, 1863. The throat presented the characteristic redness, with frothy mucus about the pharynx. There was some heat of skin; rapid weak pulse, 100. There were pneumonic crepitation in the right lung, and large moist rales in the left. She died on the 26th.

POST MORTEM EXAMINATION, twenty-four hours after death. The head was not opened. *Chest*. The upper lobe of the right lung was in the third stage of pneumonia; it was easily broken up with the finger. The lower lobe was in the first stage. There were patches of recent lymph on the pleural surfaces. The left lung was congested. Old pleuritic adhesions existed on both sides of the chest. *Heart*. The right side was gorged with semi-fluid blood and fibrine; the fibrine was very firm in the auricle. There were clots of fibrine in the left auricle, extending into the pulmonary veins. The auriculo-ventricular valves were roughened, reddened, and thickened on both sides; the left most. The *spleen* was congested and softened; the kidneys congested.

CASE XI. *Diphtheria: Second Attack: Neuralgia: Exhaustion*. Mrs. R. P., aged 62, had sore-throat and hoarseness in December 1862. She sent for me January 20th, 1863. She then had the characteristic redness of the soft palate, uvula, and pharynx, and enlarged tonsils, with a peculiar raised cup-shaped appearance of the papillæ circumvalatæ at the base of the tongue, which is always the case when the disease has existed some time. There were also congestion of both lungs; irregular quick pulse; with slight pain and tenderness in the precordial region. These symptoms were relieved by treatment; and I discontinued my attendance on February 6th, although she was not well. On June 22nd, 1863, I was again called in. There were no chest symptoms. The tongue and throat were much the same. She had great pain and some tenderness over the lower lumbar and sacral vertebrae; the pain extended down the sciatic nerves. On July 15th, I met Dr. Bond in consultation, who, from her cachectic appearance, considered that she had a carcinomatous affection of uterus or appendages. About thirty years ago she had an illness, and had never been thoroughly well since. She gradually got worse, and died July 19th, 1863.

POST MORTEM EXAMINATION, twenty hours after death. The head and chest were not allowed to be opened. In the abdomen, the parietes were loaded with yellow fat an inch and a half thick. The stomach, small and large intestines, bladder, uterus and appendages, were all normal. The *spleen* was large and very soft. The *liver* was of ordinary size, harder and paler than usual, sprinkled throughout with spots of degenerated tubercle of about the size of peas. The left kidney was of nearly double the ordinary size, congested, surrounded by fat, and contained fat in the pelvis. The right kidney was atrophied, enclosed in fat. The upper end contained a cyst filled with sero-sanguineous fluid; the walls were hard and chalky, almost like bone. The lower end contained a cyst of chalky granular matter within membranous walls. There was no proper kidney structure; the middle was filled with yellow fat and oily fluid.

CASE XII. *Diphtheria: Second Attack: Gangrene of Lung*. J. W., aged 11, had diphtheritic sore-throat in January 1863; but soon got well. On August 20, 1863, he presented the characteristic redness of throat, with pain on swallowing. No membrane was

visible. Pulse 100. On August 23rd, pain in the right side came on, with difficulty of breathing, and heat of skin; pulse 120; breath very foetid; no expectoration. There were dulness on percussion and sibilant breathing. He lay on the diseased side. The dulness increased up to the 25th, with more restlessness than pain, when he began to spit up greenish muco-purulent stinking matter in small quantity; and continued about the same up to the 30th, when he raised a table-spoonful of dark, bloody, stinking matter, and again, on September 1st, double the quantity. He became very restless, complained of difficulty of breathing, and died at 10 A.M. the following morning.

POST MORTEM EXAMINATION, twenty-six hours after death. The body was emaciated. Decomposition began in a few hours. The head was not opened. *Lungs*. The right lung was surrounded by about a pint of dark sero-purulent fluid; the lobes were agglutinated by recent lymph, attached to the pleura costalis posteriorly, and internally to mediastinum. The whole lung was in a softened, pulpy, dark, stinking condition, more especially the lower lobe; and on breaking it up and placing in water, small pieces of chalky looking matter, of about the size of mustard-seeds, settled down to the bottom. The left lung was healthy, but congested. *Heart*. The pericardium contained an ounce of dark serous fluid. The left auriculo-ventricular valve was red, roughened, and slightly thickened. The *liver* was larger, harder, and paler, than it usually is. The *spleen* was healthy. *Kidneys*. The right kidney was pale and granular; the left congested. There was pus in the pelvis of both.

CASE XIII. *Measles, Twenty-one Days: Pneumonia, Eleven Days: Diphtheria, Five Days: Purpura, Two Days*. J. W. M., aged 1½ year, the son of phthisical parents, had measles, which came out well, but convalesced slowly. Pneumonia came on at the end of the third week. He was going on favourably until the thirty-second day, when a membrane appeared on the tonsils, soft palate, uvula, and pharynx. The child gradually sank. Two days prior to death, purpuric spots were thickly scattered over the upper and lower extremities.

POST MORTEM EXAMINATION, thirty hours after death. The head was not opened. *Throat*. There were small patches of membrane on the hard and soft palate, back of fauces, and pharynx. *Chest*. The upper lobes of right lung (which was divided into three lobes) were in the third stage of pneumonia; the lower lobe in the second stage. The whole of the left lung was in the second stage of pneumonia. There were patches of recent lymph between the pleural surfaces on both sides. *Heart*. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened; mostly on left. The kidneys were congested.

CASE XIV. *Diphtheria, Three Days: Second Attack: Scarlet Fever, Four Days*. S. M., aged 5, female, had typhoid fever in February 1863; of which one sister died, and one recovered who imported it from London. She also had diphtheritic sore-throat in May 1863, and recovered. She complained of sore-throat, and looked very red on September 28th, 1863. I was sent for on the 30th, at 7 p.m. I found her in a very bad condition; the head was hot; the body and extremities covered with cold clammy perspiration; she had sordes on the teeth; the tonsils were enlarged, and there was a membrane on them. She had a weak fluttering pulse, about 170; muttering delirium, and picked the bed-clothes. She died the next day.

POST MORTEM EXAMINATION, forty-two hours after death. The head was not opened. The lungs were congested; the bronchi filled with muco-pus. *Heart*.



The auriculo-ventricular valves on both sides were roughened, reddened, and thickened. The liver was congested. The gall-bladder was distended with clear serous fluid. The kidneys were congested. The skin of the body and extremities was of a dark crimson colour.

CASE XV. *Diphtheria: Death by Choking.* F.B., aged 49 days, female, was born a fine child with cleft palate. The mother and other children had diphtheritic sore-throats previously to this child being ill. The mother stated that the child had been ailing from about a fortnight old, with apparently a cold, hoarseness, cough, and wasting, which she attributed to the cleft palate, and so had no medical attendant. She died suddenly on Oct. 14th, at 7 A.M.

POST MORTEM EXAMINATION, by coroner's order, fifty hours after death. *Head.* There was venous congestion generally. The brain was softened from decomposition. *Throat.* The tonsils were enlarged. A piece of rag, lying from the middle of the tongue, and extended backwards into the top of the larynx; it was about two inches and a half long, and had been given to the child with sugar to suck. *Chest.* The lungs were congested. There was an ounce of serous fluid in each pleural cavity. *Heart.* There were about six drachms of clear serous fluid in the pericardium. Both auriculo-ventricular valves were roughened, reddened, and thickened; the left most. The abdomen contained two ounces of clear fluid in the cavity. The kidneys were congested.

CASE XVI. *Gastric Fever: Diphtheria: Pleuritis: Hepatitis: Abscesses, etc.* J. C., aged 46, male, on August 13th, 1863, had symptoms of gastric fever, with pain in the hepatic region and lower lobe of the right lung. On the 20th, a membrane covered the tonsils, soft palate, uvula, and pharynx. On the 29th, he had endocarditis, with quick pulse (160); and slight pain and tenderness on pressure; this was relieved in three days. He seemed to progress favourably for about a week, and began to get out up to the Sept. 13th, when pleurisy of the right side set in, extending to the peritoneal coverings of the diaphragm and liver. Effusion took place on the 16th into the pleural sac. On the 23rd, he had rigors, followed by flushing heats daily, indicating abscess. On October 12th, five nodular swellings appeared just beneath the ensiform cartilage, accompanied by dull heavy pain. On Oct. 14th, vomiting and difficulty of swallowing set in; and he died on the 19th, at 10 P.M.

POST MORTEM EXAMINATION, twenty hours after death. The body was much emaciated. The head was not opened. *Throat.* There was a membrane on the tonsils, soft palate, uvula, and pharynx; also, on the hard palate and gums. *Chest.* The right lung was collapsed, pressed close up to the spine, and almost solid. The pleural cavity was filled with three quarts of semipurulent matter and flaky lymph. There were two openings through the diaphragm from the right lobe of the liver. The left lung was slightly emphysematous; otherwise normal. The heart was pale, flabby, and soft. Both auriculo-ventricular valves were roughened, reddened, and thickened. There was an ounce and a half of clear serous fluid in the pericardium; and the heart was pushed over to the left side. The liver was of nearly double its usual size, especially the left lobe. It was full of abscesses; there were five smaller ones pointing just beneath the ensiform cartilage, and two opening into the pleural cavity through the diaphragm. The spleen was enlarged and congested. The kidneys were congested.

CASE XVII. *Diphtheria: Third Attack in Eighteen Months.* L. L., aged 6, female, had been ill a month with the usual throat appearances of membrane, etc. She had ascites thirteen days, general anasarca three days, followed by pneumonia three days. The urine,

which had been previously highly albuminous and scanty, became totally suppressed; and she died comatose on Oct. 3rd, 1863.

POST MORTEM EXAMINATION, forty hours after death. The body was emaciated. The head was not opened. There was general dropsy in the cellular tissues. *Throat.* There was a membrane on both tonsils, soft palate, and pharynx. *Chest.* The pleural cavities were full of clear serous fluid. Both lungs were in the second stage of pneumonia. *Heart.* The pericardium was distended with fluid. Both auriculo-ventricular valves were roughened, reddened, and thickened; the left most. There were clots of fibrine in both auricles and ventricles, mostly on the right side. The abdomen contained a pint and a half of serous fluid. The kidneys were pale and granular, and contained pus in their pelvises.

CASE XVIII. *Diphtheritic Croup: Second Attack, Twelve Days.* E. T., aged 3 years, female, a well nourished child, had diphtheria a year ago, and got well in ten days. She was taken ill this time with catarrhal symptoms, redness of throat, and croupy cough. A patch of membrane appeared on each tonsil three days prior to death.

POST MORTEM EXAMINATION, nine hours after death. The body was warm. The head was not opened. *Throat.* The mucous membrane of the larynx was covered with yellowish looking mucopurulent matter, which extended down into and lined the trachea and bronchi for some distance below the bifurcation. On scraping off this matter, the mucous membrane looked dark and congested. Both lungs were congested, especially the lower lobes. The heart contained clots of fibrine in both ventricles and auricles, most on right side. Both auriculo-ventricular valves were roughened, reddened, and thickened. The kidneys were congested.

CASE XIX. *Diphtheritic Croup, Five Days.* S. H., aged 4½ years, female, complained of cold and sore-throat on February 13th, 1864. I was sent for on the 16th. Her tonsils were enlarged; there was membrane on both; tongue clean; pulse 140; respiration hurried; slight hoarseness. The membrane all cleared off on the 16th. Croupal symptoms increased up to the 18th, when she died at 6 A.M. Dr. Paget saw her on the 17th, at 4 P.M.

POST MORTEM EXAMINATION, thirty hours after death. The head was not opened. *Throat.* The tonsils were large, roughened, and granular looking. The ventricles of the larynx, also epiglottis at the back, were roughened and granular. The mucous membrane above the chordæ vocales was congested and looked granular, and below the cords, for about three-fourths of an inch, yellowish pulaceous matter lined the larynx. There was no true lymph. There was a little frothy mucus in the smaller bronchi. The lower lobes of both lungs were congested. *Heart.* The left auriculo-ventricular valve was roughened, reddened, and thickened. There was a clot of fibrine in the right ventricle. The kidneys were congested; and contained half a teaspoonful of semipurulent urine in each pelvis.

CASE XX. *Diphtheria, Three Days: Pneumonia.* M. A. R., aged 10 months, female, always a sickly child, had been ill for three days with cold and cough; then got hot and feverish, with white stuff in the throat. She was not seen by me previously to death.

POST MORTEM EXAMINATION, by coroner's order, sixty hours after death. There were no marks of violence externally. The body was somewhat emaciated. In the head, there was venous congestion generally. No tubercular deposits were found. The tonsils were large and roughened. The lower lobes of both lungs were in the first stage of pneumonia; the left most. The upper lobes were congested.

*Heart.* The right auricle was very much distended with blood and clot of fibrine. Both auriculo-ventricular valves were roughened, reddened, and thickened; the right most. The *kidneys* were congested. [An elder child died on the day of the inquest of diphtheria; and all the family, nine in number, subsequently had it severely.]

CASE XXI. *Diphtheria, Forty-one Days: Impaction of Bowel, etc.* S. P., aged 15, female, came home ill on February 1st, 1864, with diphtheritic sore-throat, erythema nodosum of both legs, and some phlebitis, first of the veins of the right and then of the left foot. She had never menstruated. She improved under treatment, and went out for two days. Then dysenteric symptoms came on, with twisting pain in the region of the ileo-cæcal valve. She went to bed, and gradually got worse; the pain increasing and bowels becoming constipated. In five days, a lump of the size of a small orange, globular and hard, appeared in the right iliac region, which was very tender and painful; there was slight redness and heat. Pulse weak, 130. On the seventh day, stercoraceous vomiting set in, and continued until she died, March 15, 1864. She had complained of a twisting pain and costiveness occasionally ever since August 1863.

POST MORTEM EXAMINATION, sixteen hours after death. The *body* was well nourished. The *head* was not opened. The *tonsils* were enlarged, rough, and hard. The lower lobes of both *lungs* were congested. *Heart.* Both auriculo-ventricular valves were slightly roughened, reddened, and thickened. There was a large clot of very firm fibrine in the right auricle and ventricle. *Abdomen.* The omentum was very dark red, and tied down to the bowels and parietes of the abdomen by recent adhesions. The bowels were glued together by semipurulent lymph, and there was a pint of seropurulent fluid in the cavity of the peritoneum. Surrounding the ileo-cæcal valve and appendix vermiformis, between the layers of omentum, and very firmly attached to the bowel, was a sac containing about four ounces of dark pus. The ileo-cæcal valve was almost obliterated; the bowel above was distended, and nearly empty; below it was shrunken, and the mucous membrane was very dark red and softened. Within the appendix was a small stone, very like a gall-stone. The appendix was short—one inch. The mucous lining was softened; and the external coats were red and thickened in connection with the abscess. There was soft lymph over the *spleen* and *liver*. There were no gall-stones in the gall-bladder. The *ovaries* and *uterus* were congested; there had been a slight sanious discharge per *vaginam* five days before death. The *kidneys* were congested.

CASE XXII. *Diphtheria: Scarlet Fever, etc.* B. H., aged 14½, male, of small stature and strumous constitution, had been ill a week with a second attack of diphtheria, but was getting better and going out, when scarlet fever came on, February 7th. More membrane appeared on the tonsils and throat. He was very ill for five days, but rallied, and was convalescing satisfactorily up to the 21st, when the urine became scanty, smoky, and highly albuminous, of specific gravity 1.020, and acid. He had great tenderness over both kidneys. Anasarca supervened. He was relieved by treatment up to March 6th, when he had a series of convulsive fits, and symptoms of effusion into the right side of the head; this passed off. On March 9th, pleurisy in the right side appeared, followed by endocarditis and peritonitis on the next day. On the 15th, pneumonia of the left lung commenced; and he died on the 17th.

POST MORTEM EXAMINATION, sixteen hours after death. The *head* was not opened. The *tonsils* were

of the size of walnuts; their surfaces were roughened. The cellular tissue was generally infiltrated with serum. There was very little fat on the body. The *chest* contained a pint and a half of clear serous fluid in the right pleural cavity. There was soft lymph between the lobes of the right lung, also in patches on the anterior and posterior surfaces. The lung was congested. Both lobes of the left lung were in the second stage of pneumonia. There were three ounces of bloody serum in the left pleural sac. *Heart.* The right auricle and ventricle were filled with a large clot of tough fibrine. Both auriculo-ventricular valves were roughened, reddened, and thickened; the left most. *Abdomen.* The serous covering of the coat of the bowels was very vascular, and covered with patches of soft lymph. There was a pint and a half of serous fluid in the cavity of the abdomen. The *liver* was congested; the *spleen* was large, and covered with soft lymph. The *kidneys* were very large, mottled; their tissues were softened, and very much congested. The *mesenteric glands* were large and congested; some of them contained degenerated tubercle.

CASE XXIII. *Diphtheria: Phthisis Laryngea, Two Years.* W. R., aged 44, male, had been ill for two years with hoarseness, ulceration of pharynx and larynx. He had been under various medical men. Eleven weeks prior to death, whilst out walking, he was taken suddenly with a pricking sensation in the throat, difficulty of swallowing his saliva, and palpitation of the heart. When sent for, I found the throat with characteristic crescent-shaped redness, etc. He had a fluttering rapid pulse, about 170; anxious countenance; slight pain and tenderness on pressure over the heart; tongue clean; bowels regular; urine natural. He was relieved of these symptoms in seven days, the pulse going down to 90, about his usual standard; but he gradually succumbed to the laryngeal affection, and died from exhaustion on April 14th, 1864, having been unable to swallow anything but liquids for some time.

POST MORTEM EXAMINATION, fifty-three hours after death. The *body* was much emaciated. The *head* was not opened. *Throat.* The mucous membrane of the larynx and epiglottis was ulcerated and covered with pus. The rima was permanent. The thyroid and arytenoid cartilages were almost bare of mucous membrane; they were thickened and hardened, almost like bone, and ulcerated in places. The vocal cords were almost obliterated; in fact, the larynx was one mass of disease, which extended down to the second ring of the trachea. In the *chest*, there was old tubercular disease of the upper lobe of right lung, where there was a small cavity of the size of a walnut, with very thick walls, half filled with pus. Some old pleuritic adhesions existed on both sides. The bronchial glands were enlarged, and infiltrated with tubercular matter. *Heart.* The muscular fibres were pale and attenuated. The auriculo-ventricular valves were rough and thickened by interstitial deposit; redness had gone off, mostly in the left ventricle. The *kidneys* were pale and granular.

CASE XXIV. *Diphtheria: Second Attack: Pneumonia.* C. W., aged 9 months, male, born a fine child, had diphtheria when a fortnight old, but was relieved in ten days. The second attack came on at seven months, like catarrhal fever, with redness of throat only. In two or three days, a membrane appeared on the tonsils. There was great elongation and œdema of the uvula, producing cough and noisy respiration. Symptoms of pneumonia set in seventeen days, of endocarditis five days, before death. He died on May 6th, 1864.

POST MORTEM EXAMINATION, seventy-two hours after death. The *body* was emaciated. The *head*



was not opened. The *tonsils* were large, roughened. *Chest*. On exposing the ribs to open the chest on the right side, I found an abscess at the junction of the second costal cartilage with the rib. The bone was separated from the cartilage, and felt rough. The abscess was of about the size of a walnut. The pleura covering the lung was adherent just at this spot to the pleura costalis; but there was no opening. The thymus gland was adherent to the tissues around. *Lungs*. The whole of the left lung was adherent to the walls of the chest by pleural surfaces and carnified, sinking in water when placed in whole or in pieces. The right lung was congested. The heart contained clots of fibrine in both ventricles and auricles. The auriculo-ventricular valves on both sides were roughened, reddened, and thickened; the left most. The *kidneys* were congested.

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### LINCOLN COUNTY HOSPITAL.

LACERATION OF FOOT; TETANUS; RECOVERY AFTER THE REMOVAL OF A SPLINTER OF BONE.

Under the care of E. F. BROADBENT, Esq.

[Reported by C. HARRISON, M.D., House-Surgeon.]

W. C., aged 32, was admitted at midnight, on June 13th, 1863, under the care of Mr. Broadbent. About an hour previously to his admission, his right foot was injured, being run over by the wheel of a traction-engine. The foot was severely crushed; a large flap of integument on the dorsum of the foot was torn up, exposing the metatarsal bone of the great toe, which was fractured. The other metatarsal bones were not fractured. The sole of the foot was also severely lacerated, and felt pulpy and disorganised. A moderate amount of blood had been lost; and there was still some hemorrhage, which appeared to come mostly from the sole of the foot. The heel and ankle-joint were not injured. The limb was dressed with wet lint; and a sedative draught was given.

June 16th. On removing the dressings this morning, the foot presented a sloughy appearance; the great toe was gangrenous. A consultation was called; and it was not thought advisable to interfere, as the vitality of the posterior part of the foot was good, and the man of strong constitution. The sloughy and disorganised portions were slit up with a bistoury, and a charcoal poultice was applied.

June 17th. The gangrene was not extending. A line of demarcation was apparently forming round the sole and dorsum of the foot.

June 29th. Since the last report, the gangrenous toe had separated; the fractured portion of metatarsal bone had been removed; the sloughs had all separated; and now the foot presented a healthy granulating surface; but on the previous night he complained of sore-throat, and this morning he could open his mouth only sufficiently wide to admit one finger. The muscles of the neck were very hard. He was ordered to have extract of cannabis Indica, beef-tea, and brandy. At 6 P.M., he was suddenly seized with great dyspnoea and sense of suffocation; he could only breathe in the upright position, and was not altogether conscious.

July 2nd. He had continued much in the same state; but the jaw was becoming faster every day,

and now it was with much difficulty that any beef-tea or brandy could be administered. The wound looked healthy; and a small splinter of bone was projecting through the granulations. A few incisions were made, and the piece of bone (a portion of the metatarsal bone of the great toe (was removed).

July 5th. Since the removal of the bone, the jaw had been gradually loosening; and he could now open his mouth, and eat and drink well.

From this date, he gradually improved; the wound, under stimulating applications, gradually healed; and on October 10th, he was discharged.

### INJURY OF THE RECTUS ABDOMINIS MUSCLE.

Under the care of T. SYMPSON, Esq.

[Reported by C. HARRISON, M.D., House-Surgeon.]

JOHN H., aged 20, a farm servant, was admitted on April 1st, 1863, under the care of Mr. Symson. In the evening, he was amusing himself by jumping over a cat-gallows, when he caught his toe against the cross-piece (a thatch-peg), kicked it off before him, and fell on the sharp end. When brought to the hospital, he walked into the surgery; and, on examination, a small wound on the left side and lower part of the scrotum was found. He complained of severe pain on the right side of the abdomen. He walked up to a ward at the top of the house, and was put to bed. The edges of the wound on the scrotum were brought together by a suture. He passed some perfectly clear urine soon after admission. On examination of the abdomen, a rupture of the right rectus muscle was found; the rupture was oblique, and about three inches in extent, commencing about two inches above the pubes, and about a quarter of an inch from the mesial line, and passing obliquely upwards to the outer margin of the muscle. One finger could be placed between the divided parts of the muscle. There was no mark of any injury externally, not even an abrasion of the skin. He could not say how far the stick had entered the scrotum. He was placed in bed, with his back elevated and thighs flexed, so as to relax the abdominal muscles; and a fomentation was applied.

April 4th. His bowels had been relieved; he had no pain.

April 9th. There was considerable redness of the integument, with tension and throbbing pain. A poultice was applied. In the evening, a quantity of very offensive matter escaped through a small ulcerated opening in the abdominal wall.

April 10th. Another opening, two inches to the right and lower down, discharged a quantity of fetid matter. His bowels were relieved this morning. Gurgling of the intestines was distinctly felt; they seemed close under the integument.

April 11th. Both openings in the abdominal walls were discharging freely. He had no pain. Tongue clean. Pulse 80.

April 12th. A director was introduced; and, being close under the integument, the sinus was laid open. A small incision was also made at right angles with this; and some substances, at first resembling sloughs, were removed. As, however, they did not look like disintegrated tissue, they were more closely examined; and, after washing well and removing the pus and lymph from their surfaces, they were found to be a piece of cloth about an inch square, corresponding to the trousers he wore at the time of the accident, and some portions of bark of stick. After these foreign bodies had been removed, and the wound cleansed, the fascia transversalis, covered with healthy granulations, was visible, and at the upper part of the wound the edge of the divided muscle was seen.

From this date, he progressed favourably, had no

had symptoms; the wound looked healthy, and healed gradually.

In a few weeks, he was allowed to get up; and on May 18th, was discharged cured. He could walk perfectly well; and there was no tendency to hernial protrusion.

## Original Communications.

### CASES OF STRANGULATED HERNIA, TREATED BY INFLATION OF THE BOWELS, AND BY SHAKING THE PATIENT WHILST IN AN INVERTED POSITION.

By RICHARD GRIFFIN, Esq., Weymouth.

**CASE I.** A short time since, I visited, in consultation, a female, with symptoms of strangulated femoral hernia, which had existed for a couple of days. In consequence of several attempts at reduction, the hernia, about the size of a walnut, had become very painful, and there was some tenderness of the abdomen; vomiting was frequent, and there was no action of the bowels, although several large aperient doses and enemata had been administered. I procured a pair of bellows and passed the nozzle into the anus, an assistant holding the nates well together, so as to prevent, as much as possible, the escape of air from the bowels. The patient complained of the distension giving her pain; but the inflation was continued for about a quarter of an hour, much of the air escaping either through the bellows, or by the side of the nozzle; but it was, apparently, of no benefit.

A fresh consultation was then held; when it was deemed advisable to recommend an operation. This, however, was postponed for a short time, but fortunately was not needed. In about an hour after inflation, the bowels acted freely, and all symptoms of strangulation ceased; the distension having caused the forcible withdrawal of the strangulated knuckle of intestine which had prevented the peristaltic action of the bowels. The patient recovered.

**CASE II.** In another case, to which I was called in consultation, the old woman had stercoraceous vomiting for three or four days, with constipation. The hernia was femoral and irreducible. The bellows were used in this case, as in the last; and, although they appeared at the time to have been of no avail, yet, in about an hour, a free action of the bowels took place. Unfortunately, however, there was no stopping the diarrhoea which ensued, arising from the drastic purgatives which had been administered; and the old lady died in forty-eight hours. The inflation, however, reduced the hernia; and so far was a success.

**CASE III.** I was called in consultation to a man who had a strangulated inguinal hernia, which could not be reduced by the taxis. Purgatives and enemata had been freely administered during the preceding three days. I at once tried the bellows; which had not been used many minutes, before the man called out, "You are blowing up my purse!" Such was, indeed, the fact; the scrotum having become largely distended with air, owing to a laceration in the rectum having been made with the pipe of the enema-syringe, which, I subsequently ascertained, had been so roughly used, that the man called out when the enema was being administered, and blood followed the withdrawal of the pipe. The bellows were removed, and the man immediately went to the night-stool; and a copious evacuation followed. I did not see the patient again; but I subsequently

heard that he got well, and the air in the scrotum was soon absorbed.

**CASE IV.** A fourth case has been related in one of my Poor-law pamphlets, in which a strangulated hernia was reduced by the bellows; the taxis, enemata, and purgatives, having previously failed.

These cases prove that, before the operation for strangulated hernia is performed, it would be well to try the effects of inflation; although this, like everything else, is sometimes liable to fail, as the following cases will prove; superadded to which, shaking the patient whilst in the inverted position, also failed.

**CASE V.** A man with scrotal hernia, to whom I was called in consultation, had all the usual remedies tried, including inflation of the bowels, but in vain. He was then hoisted with his knees over my medical friend's shoulders, and lifted in that position until only his head touched the bed, and had a thorough good shaking. The intestine, however, was too tightly held to be dragged from its position by this procedure; he was, therefore, obliged to submit to an operation, by which he was cured.

**CASE VI.** A lady, very stout, about 50 years of age, who had suffered for years with an irreducible umbilical hernia, for which she wore a supporting abdominal-belt, having one day used a little extra exertion, came home fatigued, and complained of pain in the bowels, followed by sickness and constipation. Enemata, salines in a state of effervescence, then opium, and finally purgatives, with inflation of the bowels, were tried, together with the taxis; but the hernia could not be reduced. A former medical attendant of the lady was then summoned from a distance; and, on his arrival, he suggested that shaking in the inverted position should be tried. Accordingly, the patient's knees were placed over his shoulders, with her legs hanging down his back, and, with the assistance of several persons present, he gradually raised himself into an upright position, the patient's head only touching the bed. He then gave her two or three good shakings, which did not occupy more than a minute or two; but, on looking at the patient's face, I discovered that breathing had ceased, and she was pulseless. We instantly placed her in the recumbent position; the window was thrown open; and a napkin, with the end dipped in water, was very freely applied to the face and chest, the slaps from it being anything but gentle. In a few minutes, there was a slight sigh; and, after a short time, we had the pleasure of having our patient in no worse a state than before the attempt at reduction by shaking; but it was felt to be a painfully narrow escape by all present, and may serve as a warning, not to be disregarded by medical men, that they ought to be careful how they turn stout people topsy-turvy. A medical gentleman from Bath was telegraphed for; but, in spite of the efforts of four surgeons, our patient gradually became worse, and died. As we were not permitted to have a *post mortem* examination, the precise cause of death was not ascertained.

### HYDROCELE.

By JOHN THOMPSON, M.D., F.R.C.S., Bideford.

**HYDROCELE** is of such common occurrence, that it must be a subject of interest to every practitioner. It affects persons of all ages, but is most frequent in the later periods of life. I know that this will be disputed; but I am nevertheless persuaded that, if it be taken into consideration how small is the number of persons living between the ages of fifty and seventy, compared with those between the ages of thirty and fifty, experience will justify my opinion.



Little need be said of the symptoms which almost invariably distinguish the disease. The pyriform shape, semi-elastic fluctuating feel, translucency, and increase of the tumour from the bottom upwards, are familiar indications. Other attendant marks, such as a feeling of weight in the scrotum, with dragging pains along the loins, are commonly present. It is curious to notice how every symptom may vary—the shape may be round, ovoid, or very much like the outline of the ram's testicle; the tumour may be almost as hard as a cricket-ball, and pain in the back be also present, equal to that felt where organic disease of the testicle exists. I mention the two last points in connexion, because one might hastily infer from them, that diseased testicle and not hydrocele was present, an error which I have known to occur. The degree of the translucency is said to vary much; but perhaps this assertion may rest somewhat on the care or otherwise with which the examination is made. Very little practical direction is usually given in books on this point; but Mr. Erichsen very properly recommends the surgeon to grasp the back of the tumour, so as to tighten the integuments, before passing the light through them.

I am satisfied that, if this plan be constantly adopted, but little difficulty will be experienced in applying this most diagnostic test, and obtaining a satisfactory result. The rays of light from a window or candle should pass laterally through the swelling, the latter being held off so as to insure this; thus the testicle and appendages which lie behind may be avoided.

Where the patient consents, which he generally will, and nothing forbids the operation for the radical cure, I presume all are agreed that this should be effected; but in a great number of persons afflicted, age, or the existence of organic disease, render it inapplicable. Under these circumstances, it is usual to adopt what is termed the palliative treatment, and to tap the swelling three or four times a year with a trocar and cannula, on which I wish to offer some comment.

It is admitted that this treatment offers but little hope of cure, the instances where it has occurred being very rare; but there is another method of dissipating the tumour that is not unfrequently attended with a radical cure of the disease; I mean the method by acupuncture.

In the congenital hydrocele of children, it will very generally succeed, and not unfrequently in that of adults. I admit its great inferiority to the practice by injection; but where this cannot be adopted, as in children and old persons, it seems to me but a common-sense thing to use the method next in order of efficacy.

For many years, I have not tapped a hydrocele with a trocar, unless as a prelude to injection; but have, in all cases, used acupuncture, and, to my great gratification, every now and then a cure is effected, with less inconvenience to the patient than had he been tapped as many times in the ordinary way.

It is no new suggestion to treat hydrocele thus, as it was long ago tried in Germany, and since in this country by Mr. R. Keates and Mr. Travers, who reported that "it acted favourably in a number of cases, but was not generally to be relied on."

I believe this is quite as much as can be said for it. My position is simply, that, as acupuncture properly performed gives the patient even less inconvenience than tapping with the trocar, and is frequently followed by a radical cure, which the operation by tapping is not, therefore it is advisable to use acupuncture in all those cases that are unsuitable for the treatment by injection, seton, etc.

There is something to be said about the manner in

which acupuncture is to be performed. It is advised by a recent writer to use a grooved needle, but for what reason, I cannot understand. If the needle is cylindrical in the shaft, with a conical point, as is usually the case, it is a very unscientific shape for puncturing tight structures like the skin and sac. All needles intended to penetrate the human structures readily, should be either triangular or spear-shaped at the puncturing extremity; and the shaft should not be large. I always use a needle that Mr. Liston employed in the operation for hare-lip; it has an expanded spear-shaped extremity for piercing, and a small cylindrical shaft. From three to six punctures may be made with this, well through the skin and sac, the scrotum being grasped firmly on its hinder part in the left hand at the same time, so as to tighten the integuments. No marked pain is felt; a little fluid oozes from the punctures while the hand is applied, but ceases on its removal; in a day or two the tumour is gone.

The needle used by the sewers of kid gloves will answer equally well with that I have described, it has a sharp triangular extremity for piercing; our needle-makers knowing that this is the form necessary for entering tough animal structures, the round conically pointed needle is only applicable for loose textures.

## Reviews and Notices.

LECTURES ON THE DISEASES OF WOMEN. By CHARLES WEST, M.D., Fellow of the Royal College of Physicians; Examiner in Midwifery at the University of London, etc. Third edition. Pp. 687. London: 1864.

A PORTION of the first edition of this work was issued by Dr. WEST more than eight years ago; and it was then described by him as "embodying the results of ten years of observation in the wards of a hospital." Since that time, two editions have appeared; one in 1858, and the other in the present year—being the work now before us. The author has, he says, "carefully revised the whole work, and added to it whatever larger experience has increased his knowledge."

The thirty-three lectures of which the book consists are distributed as follows. Lectures 1 and 2 are on the Symptoms of Diseases of Women; 3, 4, and 5, on Menstruation and its Disorders; 6, 7, and 8, on Inflammations of the Uterus; 9—13, on Misplacements of the Uterus; 14—18, on Uterine Tumours and Outgrowths; 19, 20, and 21, on Malignant or Cancerous Diseases of the Uterus; 22 and 23, on Inflammation of the Uterine Appendages, and Uterine Hematocoele; 24, on Inflammation of the Ovaries; 25—30, on Ovarian Dropsy; 31, on Diseases of the Female Bladder; 32, on Diseases of the Urethra and Vagina; and 33, on Diseases of the External Organs of Generation.

This book has been so long before the profession, and must be so well known, that to subject it to the ordinary process of reviewing seems almost unnecessary. Yet, believing that there are some among our readers who would desire to know the opinions of so eminent an authority as Dr. WEST, we will endeavour to gratify them by giving an outline of his doctrines on various more or less important topics.

*The Speculum.* Dr. WEST describes, in the second chapter, the uterine speculum, and gives rules for its

employment; and thus he confesses himself an advocate for its use. But he uses it with restriction; and acknowledges that, if he were asked the broad question, "What is your opinion of the speculum?" he would find the answer a difficult matter. He endeavours, however, to reply in this way.

"Those who first introduced the speculum into practice employed it for two purposes; partly as furnishing a new means of diagnosis, partly as enabling them to adopt various modes of local treatment, which without it were impracticable. Now, I believe that the advantages of these topical medications for which the speculum is used have been greatly overrated; though there are some cases, and those such as have proved most rebellious under other plans of treatment, in which these local measures may be resorted to with the most signal advantage. In estimating the value of the speculum as a means of diagnosis, I think that the advances in knowledge of uterine disease, of which it was the indirect occasion by the impulse which it gave to their study, are sometimes confounded with those positive additions to our information which we owe exclusively to the use of that instrument. The former have been very great, indeed; and I think candour compels us to acknowledge that they have been due almost exclusively to persons who, not content with our present means of investigating uterine disease, have laboured to increase them by the means of instruments. The latter have certainly been less considerable; but, nevertheless, the speculum enables us in many instances to decide at once, and with certainty, upon the nature of a case, which otherwise we should have understood only after long and careful watching. .... At the same time, however, that I hold the speculum to be in many cases of most essential service, I think that the endeavour of all of us should be to ascertain the minimum of frequency with which its employment is necessary. This is to be done, not by deprecating the instrument; still less by attributing dishonest motives to those who use it; but by soberly and honestly trying to test the value of the information which we derive from it, and learning to discriminate between those appearances which the speculum discloses that are of moment, and such as are of no importance." (Pp. 21-22.)

*Chronic Inflammation of the Uterus.* This subject is very fully discussed by Dr. West; who gives his reasons for dissenting from the doctrines enunciated by some eminent uterine pathologists, that inflammation and ulceration of the neck of the womb is the immediate cause of uterine ailments, and that the right understanding of the pathology and treatment of these turns on the appreciation of the importance of this condition of the cervix. The reasons which Dr. West gives for dissenting from this opinion are, in brief, the following. The argument derived from the supposed greater vascularity and higher vitality of the cervix, as to its greater liability to become the seat of inflammatory mischief, is negated by the more abundant supply of blood to the body than to the neck of the organ; by the relative share taken by the body and neck of the womb in menstruation and in pregnancy; by the fact that cancerous disease of the neck may reach an advanced stage without producing general illness or local suffering; by the impunity with which the cervix uteri may be forcibly dilated, incised, burnt, or excised; by the evident unimportance, notwithstanding the relative frequency, of abrasion or ulceration of the os uteri; by the general absence of uterine inflammation, or abundant

discharge in cases of prolapsus, notwithstanding that the neighbourhood of the os uteri is almost invariably the seat of extensive and obstinate ulceration; and by the comparative absence of local injury of the cervix uteri in prostitutes, whose course of life might *a priori* be supposed to render them specially liable to such affection. At this stage of the inquiry, Dr. West concludes,

"That the condition of so-called ulceration or abrasion of the os uteri is far from infrequent, even in cases where no uterine symptoms were complained of during life; but that it is usually unassociated with other important affections of the uterus such as may be supposed to be the effect of inflammatory action; and further, that such affections do not seem to be readily excited by causes acting on the neck of the womb, either when displaced or when the organ is in its natural position." (P. 116.)

Proceeding a step further, Dr. West inquires whether

"In the case of persons suffering from uterine ailments, there are such differences either in the kind, degree, or duration of the symptoms, according as ulceration of the os uteri is either present or absent, as would enable us to connect with it certain definite consequences, or to say that it tends to certain definite results such as do not otherwise occur." (P. 116.)

His reply to this question, founded on a careful examination of cases, is in the negative. He finds that uterine pain, menstrual disorder, and leucorrhoeal discharges, are as often independent of ulceration of the os uteri as connected with it, but that in the latter case they are apparently slightly more intense; that ulceration of the os does not appear to have any special causal relation to sterility or abortion; and that, while induration and hypertrophy of the cervix uteri has been found more frequently connected with ulceration than independent of it, the idea of a relation of cause and effect is opposed by the coexistence in numerous instances of an indurated cervix with a healthy os uteri, and by the absence in other cases of induration where ulceration has been very extensive.

But what of the argument, "that recovery from various uterine ailments is daily seen to follow the employment of caustic and the application of various local remedies directed exclusively against ulceration of the os uteri"? Dr. West admits the fact; but finds for it a solution involving a principle, not special to female diseases alone. He holds that, in many of the slighter forms, the simple hygienic and medicinal treatment to which the patient is subjected, at the same time that caustic is applied, are in reality the means best fitted to relieve most of the disorders to which woman is peculiarly subject. The very simplicity of these measures, however, and the fact that they seem to demand nothing but common sense to recommend them, diminish their value in the eyes of the patient; unless they are laid down as conditions indispensable to the success of the local treatment which is applied—with perfect good faith on the part of the practitioner—to the ulceration which he regards as the cause of the symptoms of which his patient complains. As to the real action of the caustic used in these milder cases—nitrate of silver—Dr. West attributes to it merely a slightly stimulating action which "seldom does harm—sometimes, I believe, does real good, though no more than might



have been equally attained by vaginal injections or by any other similar remedies."

But, Dr. West points out, the evil in these cases does not rest merely with the formation of an overestimate of certain therapeutical proceedings. The peculiar influence of the sexual system on the diseases of females plays an important part. When the patient recovers, she of course attributes her recovery to the cure of the local disease; and, on any return of any symptoms resembling those from which she has suffered, her mind reverts to the local disease, and "all her apprehensions are revived lest the same painful investigation, the same distressing manipulations as before, should be again required." As is the result of morbid attention to other functions of the body, so it is with regard to the uterine function; the ordinary pains and discomfort of menstruation assume undue importance, and are noted with increased vigilance; and hence the patient imagines her uterine disease, for which she has already been treated, to be again on the increase.

"Such persons among the poor come to our hospitals; and, on questioning them as to their ailments, they at once, and without waiting to describe their symptoms, say that they are suffering from ulceration of the womb; though, on examination, one finds no traces of it, or at most a little redness of the edges of the os uteri; or it may be even that slight abrasion which I trust that I have shewn to be as trivial in importance as it is frequent in occurrence. But though they have no serious disease, they are not the less, or perhaps one might say all the more, real sufferers, and sufferers most difficult to cure. The treatment they perhaps are once more subjected to serves but to confirm the morbid habit of mind which has been gradually increasing upon them, and destroying both their present happiness and their capacity for it in future years." (P. 122.)

As to the use of stronger applications such as caustic potash, Dr. West observes that they cannot be described as acting *cito, tuto, et jucunde*. They produce intense pain, nausea, or sickness, intense depression, and sometimes syncope; the duration of the treatment is tedious, confines the patient, and necessitates frequent specular examinations; and, what is of most importance, the application of caustic potash is liable to be followed by contraction or obliteration of the cervical canal, and not unfrequently by inflammation of the uterus and its appendages.

Having thus declared his opinion that menstrual irregularities, uterine pain, and leucorrhœa, are by no means necessarily connected with ulceration of the cervix, Dr. West argues that, while these morbid conditions are sometimes traceable to hepatic, gouty, or rheumatic disorder, there are many cases "in which the symptoms date back to pregnancy, delivery, or miscarriage, and in which the enlargement of the uterus, as well as the history of the patient, point to a purely local cause of the ailment." He attributes the symptoms in such cases to inflammation of the body of the uterus; and quotes, assupporting this view, put forth by him more than ten years since, the German Professor Scanzoni; who, in his work on Chronic Metritis, published last year in Vienna, says:

"We, for our part, are firmly convinced that the pathological changes of the upper portion of the uterus are of much greater moment, both locally as well as with reference to the disorder which they produce in distant organs, than the recently so highly

estimated swellings, hypertrophies, granulations, and ulcerations of the cervix."

It must be understood, that Dr. West does not neglect or underrate the local treatment of uterine disease. His chief dependence, in ordinary cases, according to the special indications, on constitutional treatment, aided by leeches to the uterus, counter-irritation and vaginal injections—which, he recommends, should be inexpensive and readily prepared by the patient herself. These means generally suffice; but, in exceptional instances, "local applications are necessary to bring about the healing of an ulcerated or abraded condition of the os uteri, which may have persisted, unaffected, or but little modified, by the general treatment."

*Source of Leucorrhœal Discharge.* Dr. West expresses his dissent from the opinion advanced some years ago by M. Huguier and Dr. Tyler Smith, that the source of discharge in leucorrhœa is the glandular structure of the cervix uteri. He maintains that the discharge ordinarily comes from the internal surface of the uterus; but at the same time admits that "a very copious secretion may be poured out from the follicular structure of the cervix uteri, and that, in some instances, as, for instance, in pregnancy, the discharge may be almost exclusively derived from it." Here there is a remarkable development of the glandular apparatus of the cervix; and the same condition, dependent, in Dr. West's opinion, on some previous irritation of the uterus, follows abortion or habitual sexual excess. The ailment is, according to Dr. West, of rare occurrence; and is essentially chronic. It is, when severe, very difficult of cure; but is generally "rather an annoying infirmity than a serious disease." The treatment which the author recommends is almost entirely local.

"I have found benefit in some cases from the introduction of dossils of cotton-wool, steeped in solution of tannin or covered with powdered alum, and applied by means of the speculum to the os uteri; but I have made less use than perhaps I ought to have done of the injection of astringent fluids into the cervical canal itself. . . . In some obstinate cases I have cauterised the whole of the interior of the cervix with nitrate of silver, by means of Lallemand's *porte caustique*, but without advantage. It seems as if in these cases the action of the nitrate of silver was expended on the copious secretion, and scarcely reached the cervical follicles themselves. Something may probably be done to remedy this evil by the employment of the douche, or of very abundant vaginal injections to clear the canal of the cervix to some extent just before the caustic is applied. I am disposed to think, however, that in the most obstinate cases it may be expedient to adopt a suggestion of M. Huguier, of which I have but small experience, though I have followed it with benefit on two or three occasions. He is accustomed to scarify the interior of the cervical canal with a small, curved, narrow-bladed, blunt-pointed bistoury, before introducing the caustic." (Pp. 141-2.)

*Treatment of Prolapsus Uteri.* In speaking of this subject, Dr. West disapproves of the procedures recommended by Mende, Fricke, Mr. Baker Brown, and others; which consist in narrowing the vaginal orifice by producing adhesion between its two sides. He adduces cases in which the operation has failed; and observes that the published records of alleged successful cases do not give proof of the permanence of the cure.

"The objection, and to my mind, the fatal objection, to these surgical proceedings for the cure of prolapsed uteri, is furnished not merely by the imperfect nature of the cure which they accomplish, and the new discomforts and inconveniences which they substitute for those before experienced, but still more by the want of permanence in their result, even when their issue is most fortunate; and this objection seems to me all the more serious, since failure in this respect appears to be the rule, success the rare exception." (P. 181.)

Still more strongly does he condemn an operation recommended by M. Huguier—that of excising a portion of the neck of the womb. It is dangerous and formidable; and, according to M. Huguier himself, is inapplicable in the very condition in which it would appear to be most needed—"a capacious pelvis and a large opening of the vulva, more or less laceration of the perineum, and considerable relaxation of the soft parts at the pelvic floor."

*Carbonic Acid Gas as a Local Anæsthetic.* Since Professor Simpson called the attention of the profession to the use of carbonic acid gas as a local anæsthetic in painful uterine affections, various experiments with this agent have been made, and high opinions have sometimes been expressed as to its efficacy. Dr. West, however, says that it has disappointed him as well as others. The results of trials in Paris have been, that it is uncertain; that it sometimes aggravates instead of relieving sufferings; and occasionally gives rise to temporary headache, drowsiness, and depression; the symptoms being, according to M. Bernard, less frequent and slighter in cases of uterine carcinoma than of congestion or inflammation. Sometimes the employment of the gas was followed by great relief of pain and by improvement in the local disease; while in other cases, though the pain was lessened and the general health improved, the local condition remained unaltered. Dr. West's experience of this remedy is thus given by him, in one of the chapters on Uterine Cancer.

"My own experience of the use of the carbonic acid gas in cases of cancer is confined to ten cases, in three of which temporary relief followed its employment, while in two the patient's sufferings seemed rather increased by it, and it was discontinued. In the other five instances the relief was not striking—certainly was not greater than a comparatively small dose of an anodyne would procure; nor was the condition of the patient otherwise more improved than might be expected from the quiet and the comfort of an hospital, though, on the other hand, no inconveniences due to the poisonous influence of the gas were produced by its employment." (P. 396.)

*Uterine Hæmatocele.* Dr. West has had eight cases of this affection under his care. He gives outlines of the histories of five; and relates three more elaborately. Including these, he has collected 103 instances; of which twenty proved fatal. He believes, however, that the usual fatality of the disease is even less.

"For, on the one hand, some of the cases have been reported as pathological curiosities; and, on the other, many which have had a favourable issue have been unrecorded. Many, too, have certainly passed unrecognised; for the disposition to the spontaneous absorption of the effused blood, unless the quantity poured out has been enormous, seems to be very great." (P. 462.)

With regard to operation, Dr. West is of opinion

that the cyst should not be punctured under the following circumstances: when the effusion is recent, and may possibly become absorbed; when the effusion, though of long standing, is gradually, even though slowly, diminishing; and when the amount of effusion increases periodically at each menstrual epoch. But he would perform puncture when a long standing effusion shews little or no disposition to become absorbed; and when rigors and hectic symptoms denote the occurrence of suppuration. In such case, he says, he would puncture through the abdominal walls, if the swelling could not be readily reached through the vagina.

*Ovariectomy.* This important topic is carefully examined by Dr. West; who has candidly reconsidered, and in great measure recanted, the opinions which he held regarding the operation when the earlier editions of his work appeared. At that time, he wrote as follows:

"These three reasons: the high mortality which experience and dexterity have failed to lessen; the special hazard attendant on those cases where yet the operation is specially indicated; and the utter uncertainty in which we find ourselves, even in the most favourable cases, as to its probable result; have chiefly influenced me in the formation of any opinion as to the general inexpediency of performing ovariectomy." (P. 597.)

Such was Dr. West's opinion six or seven years ago. Now, however, he admits that, while ovarian disease remains just where it was, so far as curative measures—iodine injections, etc.—are concerned, the reply as to the safety of the operation of ovariectomy must be much more favourable than heretofore. This improvement he attributes to the labours of surgeons in this country and in America. His approbation of the operation, however, appears from some expressions to be still qualified.

"It seems that completed ovariectomy is nearly as fatal as before; that life is prolonged but little longer than it was formerly in fatal cases; and the causes of death are much the same as they were, although I have no doubt that, owing to improvement in the details of the operations, there has been a reduction in the risk of mere hæmorrhage.

"The great advance which has been made, however, appears in the certainty of diagnosis that has now been attained, as seen by the far fewer instances where the operation has been commenced, and abandoned either from adhesions, or from some other cause interfering with its completion." (P. 601.)

Yet, at page 603, we find the author speaking as positively in favour of ovariectomy as any rational advocate of the operation can desire.

"I think that we are now bound to admit ovariectomy as one of the legitimate operations of surgery; as holding out a prospect, and a daily brightening prospect, of escape from a painful and inevitable death, which at last indeed becomes welcome, only because the road that leads to it conducts the patient through such utter misery."

After pointing out what he considers to be the contraindications and the indications for the performance of the operation, Dr. West, in his concluding remarks on the subject, strongly condemns

"The practice of testing some of these questions as though they were questions of moral right or wrong; as if ovariectomy could not be defended save for some sinister end, nor its expediency be doubted except from a moral obliquity rendered excusable only by



hopeless dulness. Belief in each other's integrity of purpose seems to me essential to our eliciting truth by discussion; and I see no reason why I am to suspect another of being less mindful of our common duty to humanity, because he tries to relieve suffering or to prolong life by some means in which I have not the same confidence." (P. 605.)

This quotation proves that, while Dr. West never hesitates to differ from his fellow-labourers in the same field wherever he believes difference to be necessary, he does so in a liberal spirit, and in full recognition of the honesty of purpose of those from whose opinions he dissents. We must now conclude our notice of this book; in which, indeed, we have been obliged to leave unnoticed much that it would probably have been interesting to place before our readers. That we have so far departed from our rule of but briefly noticing works which have passed through several editions, is due to the fact that, through some accident, Dr. West's work has not hitherto received in this JOURNAL that attention which was due to it. Perhaps, however, this previous omission is scarcely to be regretted, inasmuch as it has given us the opportunity of noticing the latest—and sometimes the changed—opinions of so eminent an authority. Dr. West deserves well of the profession, and especially of those interested in the subject of which he treats, for having so ably laid before them the results of his own large experience. The book is one which gives its author a place in the highest rank of those who have in recent years laboured to increase our knowledge of the diseases of women.

## British Medical Journal.

SATURDAY, OCTOBER 22ND, 1864.

### THE INTRODUCTORY LECTURES.

THE Introductory Lectures given at the different Medical Schools, abstracts of most of which will be found in our columns, present an interesting subject for a passing study. Looking beyond the immediate occasion, they give us an opportunity, not afforded in any other way, of obtaining a glimpse of the minds engaged in the important work of medical teaching; of seeing, also, what subjects, occupying the attention of the profession, bear especially on the interests and prospects of those just entering it. We may derive from them also indications of educational changes needed, or of the working of those recently made.

Keeping in view the men to whom these lectures are more particularly addressed, we feel almost intuitively that the duties and responsibilities of the profession, its labours and rewards, the bearing and importance of the various studies, the necessity for regular and persevering work, and the best methods of pursuing this work, with exhortations to honest purpose and an upright life, should form the staple topics. Whatever these subjects may be to others,

they are to the numbers of new students each year brought up to London to a certain extent new. They may, at least, impress upon them new force through the individuality of the lecturer; and there can be no question that, in many instances, good and permanent impressions are so produced. We think it, therefore, an excellent sign that so many of the orators have disregarded the almost inevitable risk of finding many of their good things already said; and that, remembering the time when they, too, were entering upon a new career, they have dwelt much upon the points mentioned. The tone of these discourses is thoroughly earnest; they could come only from men who feel the responsibility of their position, who love their profession, and who have given much deep thought to their work. We need not characterise the different styles, which present considerable variations; some aspiring to eloquence (those of Dr. Braxton Hicks and Dr. Down, for instance), others inclining to the philosophical (as that of Mr. Callender); the older hospitals giving an opportunity for an appeal to history, and to great names associated with them, which was effectively used.

As was to be expected, the Army Medical Service was a prominent topic. The unanimity of the profession on this subject cannot fail to catch the attention of our legislators; and we venture to predict that, in the absence of any general cause of excitement, the next session of Parliament will not be very old, before the authorities at the War-office are called to a reckoning, unless, indeed, they are wise in time, and grant the concessions demanded.

With regard to professional education, the teachers seem disposed to halt for a time and test the recent changes. With one exception, all seem to regard them as in the right direction, and complain only of the imperfect application of them by some of the corporations. There is one decided want, however, which we should fail in our duty to omit to mention, that is of some more general efficient system of clinical instruction; this cannot be too fully and openly recognised, in order that a remedy may be found without delay.

### BANTINGISM.

MR. BANTING may, we think, be considered a fortunate individual. He has given a name to a system; he has occupied the public attention to a degree which, we imagine, has given him surprise and satisfaction. He no doubt enjoys the consciousness of being a public benefactor; and he has even had the gratification, at a very cheap rate, of appearing before the world more or less in the character of a martyr. He has, in reality, been the means of doing good, though in a way not exactly such as he imagined. He has obtained for the profession a hearing on the subject of dietetics; and, not to mention the

numbers of medical men who have spread their sheets to the favouring gale, has given to scientific experimentalists the opportunity of turning to more immediate account the results of their valuable labours.

Our readers are familiar with the points of Mr. Banting's system. He has recently supplemented his original statements by the information that a given quantity of loaf-sugar per week will add nearly double the amount to his weight. In this he is supported by the of course not very philosophical testimony of Mr. Mechi, who, on the strength of his experience, recommends sugar for the fattening of cattle. Mr. Banting further states as a fact, to him inexplicable, that, on commencing his system, the most remarkable loss of weight occurs within the first four and twenty hours, amounting to two, three, or more pounds; and he concludes that, as a matter of course, this loss and the gain from taking sugar represent so much fat, leaving out of account altogether the varying amount of fluid in the tissues of the body.

The truth is, that considerable variations in the weight of an adult are the rule, and not the exception; and the conditions influencing these have been so ably stated from careful experiment by a Fellow of the Royal Society, in a letter to the *Times*, that we are tempted briefly to reproduce his statements. Before and after a meal, before and after voiding the excretions, there is, of course, a marked difference—not improbably overlooked by some of these amateur experimentalists. Again, a man is always one or two pounds lighter in the morning than over-night, from loss of carbonic acid and water from the lungs and skin during the night. The Sunday's repose and the Sunday dinner make a difference of three or four pounds in the weight of a man of active habits, the food not being worked off by exertion. A sudden frost, by constringing the cutaneous capillaries, by rendering combustion more active, and by increasing the flow of urine, brings down the weight. A thaw, on the other hand, causes the skin to fill with blood, the extremities to swell, and, especially when evaporation is hindered by a saturated condition of the atmosphere, increases the weight. Hard work on a hot day will reduce it. In nearly all these cases, the difference in weight is due to the greater or less quantity of fluid retained in the body. The accumulation or removal of fat is a much slower process. It will gradually disappear under the influence of a diet from which fat, sugar, and starch are excluded, and especially when exercise is combined; but, for its formation to any considerable amount, a constitutional predisposition must exist. Some persons would make fat under no circumstances short of the Dahomian system of enforced inaction and cramming with oleaniginous food, or would die rather than fatten under this. When the disposition is present, it will be encouraged by all the fatty constituents of

food, animal or vegetable, and, to a less extent in proportion to the amount taken, by starch or the sugars; these substances either undergoing a change of deoxidising character which converts them into fat, or supplying readily combustible material, and allowing all the fat eaten to be stored up. As we can take larger quantities of starch and saccharine than of fatty matters, they may actually supply more of the material from which adipose tissue is formed; though, weight for weight, they would yield less than fat. Experience teaches us, however, that fats nearly identical in chemical composition give very different results when taken as food; and starch and sugar have not necessarily the same value as foods because they are both hydrates of carbon. To take the number of grains of nitrogen and carbon as the sole point of comparison between different diets leads to the most fallacious conclusions. By remembering that differences in weight may be due to fluid, as well as to fat, we may estimate the value of the facts with which Mr. Banting and others are kind enough to furnish us.

The *Times* has on several occasions roundly accused the medical profession of complete ignorance of the subject of dietetics, and concludes that the experiences of Mr. Banting are as new to it as to general society. We could refer to numerous authors to show that the principles of this branch of science have been accurately laid down, and all Mr. Banting's facts anticipated before he came into the world; and recent observers (we would here name especially Dr. Edward Smith), by a course of experiments carried out with scientific rigour and untiring perseverance, have ascertained the exact nutritive value of almost every article of diet. The profession has nothing to learn from Mr. Banting except the good results of applying practically the vast stores of information at their command.

On the evening of the 13th instant, a new Special Hospital, or rather a Course of Clinical Lectures at a new Hospital, St. John's Hospital for Diseases of the Skin, was inaugurated with considerable *éclat*. The medical staff and their supporters, properly wise in their generation, show a knowledge of the means by which success is to be sought in the present day. A saint lends his name. A large room at the Westminster Palace Hotel is engaged for the opening lecture; the attractions of a *conversazione* are added; and a numerous company invited. They may be congratulated on the result so far as it is indicated by the numbers who attended. The address, delivered by Mr. Erasmus Wilson, F.R.S., consisted mainly of an account of the origin of the hospital, and the want it was intended to supply. Of course, much liberty of speech is allowable on an occasion like this; but we can scarcely agree



with all that was said. Cutaneous medicine has not been so utterly neglected in London as seemed to be implied. Witness the advertisements in the *Times* from day to day. Moreover, completely to ignore the long established and well known Hospital for Skin Diseases at Blackfriars, was neither judicious nor fair. Special hospitals are the order of the day; and, without conceding to this all that was claimed for it, or to the colleague of Mr. Wilson the transcendent virtues he attributed to them, we may acknowledge that they are ambitious and energetic, and wish the new institution a good position among the Special Hospitals of London.

OUR readers will have already seen with sorrow, in the daily papers, accounts of the fearful plague of fever which has, at Bermuda, so rapidly carried off many of our army medical officers. These gentlemen—non-combatant officers, forsooth!—were sent from Canada to combat as deadly an enemy as soldier could encounter in fiercest war, and have fallen in the work, doing their duty as nobly as the man who mounts, in a forlorn hope, the deadly breach! Facts like these would, one might think, make even the cheek of double-dyed red-tapism blush, and its ears tingle, when it reflects upon the injustice and the indignity which it still attempts to impress upon the branch of the service to which these noble fellows belong. We record with pleasure what the world says of these men and their work. Will Parliament longer permit the Horse Guards to deal unrighteously with a service that produces such heroes?

The *Montreal Herald* of September 24th says: "Not many days ago, it was our duty to mention the departure from this country of a number of military surgeons ordered to Bermuda, to render such poor aid as medical skill can afford to the many sufferers in that island attacked by yellow fever. On Saturday, official information was received that Dr. Clarke and Dr. Milroy have succumbed before the fatal epidemic. Surgeon-Major Barrow has also been taken down by disease; but we believe that in his case the attack was complicated by dysentery, and at last accounts he was reported to be recovering. Dr. Fergusson, also of the 30th, has been attacked, and was not out of danger when the last advices came away. Out of eleven surgeons who left this city on the 17th ult., we have had within thirty days the intelligence that five have been assailed by the fever; and that two, if not three, have died."

"THE LATE DR. CLARKE, 15TH FOOT. This young officer, who has perished among the seven military surgeons in the epidemic at Bermuda, is the second of one family in the Army Medical Department who has lost his life in the service. His brother, Assistant-Surgeon William Clarke, of the 35th Regiment, when the other two officers were killed in the affair at Arrah, in India, and the men were retreating, drew his sword and rallied them until shot down himself mortally wounded. John Clarke served throughout the war in the Crimea, including the Alma and Inkerman, through the whole of the Indian campaign under Sir Hugh Rose. His services in the Crimea were considered great, and he was

brought to notice in dispatches in the Indian mutiny. He was generally beloved and respected by both officers and men, and had made many real friends among officers of very high rank. He died September 4th, 1864."

"THE LATE DR. MILROY. The name of this excellent young officer is now added to the melancholy list of those brave men who have fallen at Bermuda in the discharge of their humane but extremely perilous efforts to stay the progress of a terrible visitation. His career has been comparatively brief, but marked by devotedness to his country's service, and distinguished eminence in the studies belonging to his profession. He entered the army at the outbreak of the war with Russia, and continued throughout all that memorable campaign. Bravely did he fulfil his duties in the battles of Alma and Inkerman, under the fire of the enemy, and in the trenches before Sebastopol; for which services, in addition to the Crimean and Turkish medals, he was decorated with the Order of the Medjidie. On the termination of the war, he continued with his regiment in Ireland, the Mediterranean, and for the last three years in Canada, where he is well known, and has left many devoted friends. To his fellow-officers he was greatly endeared by his gentleness of manner, fine cultivated taste, high honour, and genial disposition; while the private soldiers of the 30th held him in affectionate veneration for his unwearied efforts to advance their comfort and intellectual and moral improvement."

MR. SYME, speaking of clinical teaching, makes the following remarks respecting the proper remuneration of medical instructors. It is gratifying to us to see that so great a surgical authority and so well known a teacher is not above taking a sensible view of medical education, and viewing it from its material aspect.

"So long as both the instruction and attendance are regarded as matters of course, and certified by the surgeons collectively in favour of every student who pays his fee for admission to the hospital, it would be vain to expect anything better than the present system of sham. In Edinburgh, clinical instruction is more highly remunerated than any other department of medical tuition; since, the fees being the same for all, while the clinical lectures are delivered only twice instead of five times a week, a student pays two shillings for each of them, and not more than tenpence for any one of the others. If reform is really desired, it should be founded on the concentration of responsibility and the adequate remuneration of service rendered."

THE following suggestions for the custody and sale of poisons have been made in a report of the medical officer of the Privy Council.

"1. That none but qualified persons, educated to the trade of druggists, should be allowed to vend by retail drugs or medicines capable of acting as poisons. 2. That the sale of poisonous drugs by chandlers, grocers, oilmen, drapers, or small shopkeepers, should be strictly prohibited. [A licence might, if necessary, be granted, enabling these persons to sell certain specified medicines used by the poorer classes.] 3. That the sale of arsenic, strychnia, and other specified poisons should, after a certain date, be restricted to pharmaceutical chemists and licentiates of the Apothecaries' Society. Any other persons acting as druggists not to be permitted to sell them, until they have proved their knowledge of poisonous drugs

ly undergoing a proper examination. 4. Under no circumstances should boys or girls, or persons who cannot read or write, be permitted to sell poisonous drugs. 5. Some rules are required for the management of a licensed retail trade in poisonous drugs. No youth should be allowed to dispense or sell them who is not above the age of eighteen years, and who has not been for at least one year engaged in the practice of pharmacy, under a pharmaceutical chemist or licentiate of the Apothecaries' Society. This restriction not to be applied to one who has passed an examination either at the Pharmaceutical Society or at Apothecaries' Hall, as to his knowledge of poisonous drugs. 6. That poisonous drugs and medicines having a similar colour and appearance should not be kept near to each other in similar bottles, drawers, or boxes, with similar labels. 7. That less facility should be given for the purchase of arsenic, strychnia, and other deadly poisons, which can be used for the purpose of suicide or murder. 8. That no poisonous drugs should be sold to girls or boys under the age of twenty years, on any pretence whatever; and that, in all cases of purchase, there should be a witness of adult age. 9. All poisonous drugs sold should be distinctly labelled with the name of the drug, the address of the vendor, and the date of sale. 10. That noxious substances, such as arsenic, corrosive sublimate, sugar of lead, and tartar emetic, and others of the like nature, when stored in large quantities in casks or packages, should be distinctly labelled, and kept apart from other substances of an innocent kind which they resemble."

THE Directors of the British Medical Provident Fund held their first meeting at the Freemasons' Tavern on the 20th instant. There were present: The President (Dr. Richardson) in the chair; T. H. Smith, Esq.; R. B. Carter, Esq.; E. Daniell, Esq.; H. Veasey, Esq.; Dr. Bryan; Dr. Chevallier; Dr. Armstrong; Dr. Collet; T. T. Griffith, Esq.; Dr. P. W. Latham; T. Paget, Esq. (Leicester); John Clay, Esq.; Dr. Fayrer; C. F. J. Lord, Esq.; Dr. E. Waters (Chester); Dr. A. P. Stewart; Dr. Desmond; and Dr. Falconer (Bath). It was decided that the Fund should be thrown open to the whole profession; and that the question as to the limitation of age to 60 should be referred for consideration to the Executive Committee. It was also decided that the benefits of the Fund should extend to disability from accident, but not to partial disability; and that, for the first two years of the existence of the Fund, no member should insure for more than £100 *per annum*. There are still six Directorships to be filled up. Mr. Westall was appointed Treasurer, and Dr. Henry Secretary, of the Fund. The Guarantee Fund already amounts to about £350.

M. BRIQUET, in the name of himself and of MM. Louis and Barth, read to the Academy of Medicine a report on a paper of Dr. Gintrac of Bourdeaux, "On the Contagiousness of Typhoid Fever".

"There is," says the report, "in typhoid fever, as in all other communicable diseases, a question of theory and a question of fact. Let us first note the chief circumstances attending contagious diseases.

1. Typhoid fever arises primitively under the influence of divers conditions. It becomes afterwards communicable. Thus, of the twenty-eight general diseases which are contagious, twenty-one arise in a similar manner, and afterwards become contagious. 2. All contagious diseases are transmitted by the agency of a visible or invisible germ. The germ of typhoid fever is invisible, as are the germs of seventeen of the contagious diseases. 3. All contagious diseases have a period of incubation, as has typhoid fever. 4. Contagious diseases, at some period or other of their progress, show signs of their presence in the skin or mucous membranes. Typhoid fever shows such signs. 5. Most of the contagious diseases rarely occur a second time in the same person. The question of fact may also be disposed of in a similarly definite way. In the hospitals of large towns, facts of communication of the disease are rare; but they are not so rare in private practice. Yet they are only observed in a limited way in isolated cases, and in small localities. And, under this head, communicable diseases may be arranged in two classes. Some of them are readily communicable, such as small-pox and measles; whilst others, as dysentery, hooping-cough, erysipelas, and amongst these typhoid fever, are only communicated under certain conditions of the atmosphere, intensity of the disease, or defect of aeration."

The reporter, after making some remarks on the typhus of the bovine species of animals, gives an account of the facts detailed in Dr. Gintrac's paper.

"The first—a female—patient arrived in ill health from a district and from a house where typhoid fever existed. She had returned to her family, and into a district where there were no patients; and immediately afterwards the fever breaks out in the house, and attacks several persons. Besides this, several of the relatives, or those who had acted as nurses, and were previously in good health, were successively seized with the fever. And, lastly, three persons, who had contracted the disease by communication, dispersed into different localities, where no fevers existed; and there, after their arrival, typhoid fever declared itself in each of the families into which these three persons had entered. It may be added, that the villages indicated were the only ones in which the fever had shown itself."

M. Gréant asserts, that the results concerning the capacity of the lungs, obtained through experiments on the dead body, are never correct. The pulmonary capacity depends upon the elasticity of the diaphragm and of the walls of the thorax; and this elasticity does not exist after death. He, therefore, determines the pulmonary capacity by the inhalation of hydrogen. Hydrogen, on the least inspiratory effort, penetrates into the smallest bronchia. By analysis of the expired gases, he obtains the capacity of the lungs.

In a late discussion on fever, M. Bouley, the veterinary surgeon, remarked, that it was a complete mistake to suppose that the typhus fever of cattle resulted from faulty hygienic conditions or from crowding of the animals. This typhus arose in the steppes of Eastern Europe, and there only. The disease is unknown in France, in Austria, and in Prussia, thanks to a strictly guarded sanitary frontier.



# Thirty-ninth Annual Meeting

OF THE

ASSOCIATION OF GERMAN NATURALISTS  
AND PHYSICIANS

AT GIESSEN.

THE Thirty-ninth Meeting of this the parent of all wandering Associations was held at Giessen during the days from the 17th to the 23rd of September. As it was begun under the happiest auspices, so it was carried to a dignified and happy end. Already, a week before the time appointed for the beginning, there were five hundred visitors from all parts of the Fatherland announced; and amongst them the *coryphées* of all branches of science. It was, therefore, not astonishing that at high tide the numbers of the participators should have risen to fifteen hundred, and that, after every student's cabin and every hospitable citizen's spare room were occupied, the remaining visitors should have had to be quartered upon the neighbouring towns of Wetzlar and Marburg, being taken to and fro by express trains on the railways. Giessen is but a small town of 10,000 inhabitants, but a provincial capital, and, above all, an ancient and celebrated university. As a university, particularly, it is well liked throughout Germany; and it was this feeling which brought many men of importance there, and caused them to add their dignity to that of the assembly. Was it not the cradle in which all the younger chemists on the globe had, at one time or other, been rocked? Were not associations of the most solemn kind connected with that peristyle on the Seltersberg, where the master-mind thought, worked, and taught? Had not all the mineralogists revelled in the oryctognostic treasures of the neighbourhood of this town, where plutonic, neptunic, devonic, and basaltic formations, meet to produce a kind of agreeable chaos—a large stone pit for the geologist to hammer his samples? Here Dieffenbach had died, after having travelled round and all over the earth. There was the Anatomical Institute, which, to the medical mind, recalled the association of Bischoff, this master in demonstration. In short, every faculty, from the theological to the agricultural (for there is now a Faculty for National Economy), had its historical attractions; and thus the feast became, not only one of naturalists and doctors, but even the lawyers participated in good style; the theologians dropped Adam, and listened to the tale about the fossil-man from the Neanderthal; and there was an amount of science absorbed by the fair sex, which, with the young, will pass as a recommending accomplishment—with the elder sisters, as the result of a life-long application.

We arrived at Giessen on the morning of September 19th. I must here explain that the "we" which I have just used is not the *pluralis majestatis*. For as I did not sink my individuality at that meeting, I do not intend to do so now, when I am writing. "We" were eight comrades, from as many points of the compass, who met at Frankfurt in a railway-carriage.

Well, then, we arrived, were received, entered our names, got our cards, lodgings, programmes, and, greatest treat of all, our luggage was taken care of by one set of friendly townsmen, the "Dienstmänner", while some intelligent young boys of the gymnastic society, "Turner", acted as our guides. They looked so agile, that my friend from Mexico, who has some inclination to exaggerated dimensions, was nearly prevailed upon by me to try a little "Dauerlauf" down the hill, to see whether the constitutional would not be a good preparation for the great dinner in the afternoon. My Turner led me correctly to my lodging, as I can vouch; for, years ago, I had known the way myself. However, it was very good that I had this young guide, to tell me who lived in the new houses that had been built, and what had become of the occupants of old ones. I had entered that town often, without a guide, on foot or in a post-chaise; but never in such state as on the present occasion. I came in the throng, with music at the head of a procession, colours flying, guns saluting, and everybody turning out on the balcony or at the window to welcome; the hosts at the doors to receive their guests. I, too, was received by a friendly host and his daughters two. I pressed the hands of old friends; and then subsided into what Giessen children know as "the Corner".\*

At a quarter to eleven, the large hall of the Town Club was thronged with a brilliant assembly. The President, or, as he is termed by the statutes, "first business leader", Dr. Wernher, Professor of Surgery, delivered the opening address. As a greeting to the assembly, it was most cordial; as an introduction to strangers to the town and university, it was most happy; as a history of the rise of the institutes connected with science in that little place, it was admirable. Of the twelve special institutes for the teaching and advancement of science, which a state of not one million inhabitants maintains in this university, besides the theological, juridical, and philosophical faculties, he gave the history of those which, as being the first, had the greatest difficulties to overcome, the University Hospital and the Cliniques. Of the founders, he named Balser, Wilbrand, and others; but modestly omitted to mention himself, as the founder of the Museum for Morbid Anatomy, an institution which began with the purchase by the Government of the collection of Soemmering, the German John Hunter. Loud applause followed this interesting, and withal short, address. The assembly was then greeted by the Government of Hesse-Darmstadt, through its deputy Councillor Küchler. Next came the Burgomaster, the friend of students, known as "Black Vogt", whom years may make more portly, but they have certainly not made him less black or less liked. In a short speech, he welcomed the assembly on the part of the citizens of his town, and gained such thunders of applause for his manly representation of citizenship, that all other oratorical successes paled into insignificance. Then came the "Rector Magnificus", who, as an anecdote has it, is this year the first man of Giessen, but next year relapses into his former nothingness, and with becoming dignity and that versatility of style mastered alone by professors of history, proffered to the assembly the welcome of the University. The Vice-President (*Germanice*, "second leader of business"), Professor Leuckart, now read the statutes of the Association, and in doing so requested the assembly to correct a ludicrous mistake in the wording of Article 17, which, amongst more cheering and laughter, he showed had been misprinted for the first time at Bonn years ago, and since re-misprinted by various generations of

\* The House of the Protestant Bishop, Rev. Mr. Simon.

"leaders of business." He communicated that the Grand Duke of Hesse, and his nephew Prince Louis of Hesse, would be unable to attend the meeting; but that the Archduke Stephan of Austria was present upon their invitation, and, in return, requested the assembly to pay him a visit at his Castle of Schaumburg. The Town Councils of Ems, Naheim, and Marburg, had sent invitations to the assembly, which, like that of the Archduke, were duly honoured. Next came a piece of indiscretion on the part of the old Leopoldine-Caroline Academy. This tottering institution demanded to become the guardians of the documents of the wandering assembly. Then, the new democratic Academy at Frankfurt, the "Freies Deutsches Hochstift," made a counter-proposition to the same effect in its own favour. Thereupon, much talking "about the Emperor's beard"; until at last a frivolous member asked, whether there were any documents at all in existence? Thereupon, the "leaders of business" declared they had not received any. Whereupon, great was the laughter! Then, a rambling discussion; until Vogt of Geneva moved to leave things as they had been. Great cheering, and motion accepted by applause. "Es bleibt alles beim Alten."

The meeting then settled down into a more serious condition of mind, and listened to a lecture by a Dr. Jessen of Eldena, On German Inquiries into Natural Things. He insisted that Bacon of Verulam had not invented the inductive method; but that, if the Germans of the sixteenth century were not entitled to the honour, Roger Bacon certainly was. What he said about James's Chancellor was a faint echo of Liebig's well known researches on this important subject of history. Next day, while walking up the hill of Schaumburg Castle, I had some conversation with this orator, and found, to my surprise, that he had not even read Bacon of Verulam's works. I told him that he might have made his case ten times stronger, and proved more than Liebig himself, if he had attacked Bacon's astronomy, and the manner in which he endeavoured to make Copernicus ridiculous. As for the rules of induction, those (I said) had been fully stated by Aristotle; and it was exactly for this reason that (as is reported in *Bacon's Life*, in the splendid edition in the Royal College of Physicians, London), from his sixteenth year to the end of his life, he had hated Aristotle. A thinker must needs be hateful to a dreamer. This proposition and its truth was again illustrated by the speech of Dr. Volger of Frankfurt, on the Darwinian Hypothesis of the Origin of Species, which followed upon the lecture of Dr. Jessen. In a kind of *feuilleton* article, this versatile and dialectically accomplished gentleman demolished, to his own satisfaction, a theory which Darwin himself had never enunciated. He maintained that Eve's forehead had not been flattened backwards like that of the Neanderthal skull, but had been as straight and high as that of any of her daughters which crowned the galleries. He thought knowledge was useless if it led to such conclusions as Darwin's, and ended by the paradox, Long live no knowledge. Alas! it already lives long enough, and will yet live long enough, without Dr. Volger's help or good wishes.

But the meeting resolved to have some knowledge; and the "first business leader" closed the meeting, to admit of the constituting of the sections for the several branches of science. Ten sections were consequently formed, and marshalled to their respective meeting-rooms. There they all appointed presidents, secretaries, made rules, lists of announced contributions; and, before two o'clock was well round, everybody was again somewhere else, on the alert, to look out for good places at the dinner.

About half-past two, Zinsser's (formerly Busch's) Gardens presented an animated appearance. It was here that new arrivals met groups already made; it was in the open air under trees and amongst shrubs and flowers, that "combinations" were made. At last, the hall was entered, and seats eagerly sought by their owners. The hall had been built from the foundations expressly for the celebration. It was constructed similar to the picture-gallery in the late Exhibition Building at London, with light from above, gauze instead of glass to promote ventilation, and covered all over with fir-twigs, garlands, and flowers. The walls were ornamented with the arms of the towns where the thirty-eight former meetings had taken place. At the great southern wall, above the orchestra, was the gigantic figure of Germania, with the necessary amount of black, red, and golden banners around. At the eastern wall, was a nice picture of Galileo in the conclave, at the moment when he bursts out, "It moves nevertheless."

Of the next hour or so, I can report nothing; for I did not then take in impressions, but dinner. I was only now and then roused by the toasts, which, in that anomalous country of the Germans, are curiously interspersed with the services of the dinner. Soup—no toast. Fish, etc.—first official toast—of course, *Pater Patria*—great enthusiasm—music, "God save the Queen." Happily, they did not attend that standing; but while the music continued, the dinner also did. Roast beef, etc.—second official toast, The German Association of Naturalists and Physicians. Well, that was hearty! Be embraced, ye millions! This kiss to the whole world! Venison and other game—third official toast, The University of Giessen. Up to that moment I had drank out of small glasses. But then I remembered my Hippocratic oath, and that I had vowed not to be modest, and went and fetched one of the large golden tankards of the University, which had been given to it by Landgraf Philip the Magnanimous. I made it brimful of ancient Niersteiner, and let the loving cup go round. Then I remember sweet dishes, dessert, interspersed with many toasts of non-official character. I also remember having to answer many invitations to join in a glass to our mutual health. At last, I planted the big tankard before me, emptied it in memory of Old England and the British Medical Association, returned it, as in duty bound, to the magnificent beadle of the University, and was much the better for having had my dinner.

The afternoon and evening were spent in strict accordance with paragraph 2 of the Statutes: "The principal object of the Association is to afford to the naturalists and physicians of Germany opportunities for making the personal acquaintance of each other." Amongst the naturalists, the chemists were certainly foremost that evening in making acquaintances; which is not surprising, seeing that affinities are their constant study. Some ceased to be mathematical, and forgot all about equivalent; *et voila*, what a man can stand. Some celebrated physicists were heard late in the evening having a discussion on equilibrium. All medical conversation was, of course, banished from the mixed assembly of the evening; but, nevertheless, the physicians shone splendidly. They were sad and serious; and none more so than your humble servant, Mr. Reader. For, to keep himself *au fait*, he was executing in his mind the integration of Euler's Integral (formula considerably omitted) by means of Cauchy's method of Integration by the Imaginary. This is a much better test than the vulgar one of walking on a straight line. After the unusual excitement of this 17th, it composed me like a dose of Dover's, and brought me happily late into the 18th. Recipe—After Integration



by the Real, and Disintegration of the Real, try Integration by the Imaginary. *Probatum est!* Who wants more information is requested to enclose a fee.

On September 18th, the Mineralogical Section mustered at six o'clock in the morning at the railway-station, and started for Schloss Schaumburg, where they arrived at nine. They were received at the castle by his Imperial Highness the Archduke Stephan of Austria, and by him introduced to his splendid collection of minerals deposited in a handsome room in one of the towers of the castle. The illustrious host explained the arrangement and the principal specimens of his splendid collection himself; and astonished all professional teachers both by the substance and the manner of his delivery.

The Archduke Stephan, as Palatine of Hungary, with Kossuth for his minister, had, in the year 1848, stood up for the rights of Hungary. For this he was accused of treasonable designs upon the crown of that kingdom by the Vienna Camarilla; but having, in reality, no such designs, he was deserted by Kossuth and his crew, and being the only man in this great struggle who had an honest purpose, he fell to the ground. As a clever and accomplished man, he was, of course, declared dangerous by the Hapsburg maenad, the Archduchess Sophia, his beloved aunt, and banished in disgrace to Schaumburg, in the Lahn valley in Nassau, an inheritance of his from his mother's side. The thirteen years of leisure he there devoted to the embellishment of his fine estate, the rebuilding of the castle, and, above all, to the cultivation of natural science. In this manner, it was possible that he could invite the German men of science as one of themselves, attend their meetings, and, by his learning and hospitality, gain universal favour.

The great throng of the Association arrived at Schaumburg about eleven o'clock. After visiting the towers, and enjoying a magnificent view from the basket on the masthead, from which floated the Imperial standard some two thousand feet above the level of the river below, I joined the breakfast on the lawn, and, abstaining from the Markobrunner, quenched my early thirst in coffee. That and many "hochs" over, the Archduke headed the retreat towards the railway-station, being anxious that his visitors should not be too late for their visit to Ems, which was to take place in the afternoon. At the railway-station, he was addressed by the "leaders of business", and greatly cheered. He replied in a fine speech, delivered with clearness and emphasis. As the train filed past the station, I saw his wiry, tall figure, and dark, thin, eagle-like countenance, bow and smile the parting acknowledgments to the enthusiastic naturalists and physicians.

Ems, beautiful Ems! Hygieia of youth and beauty, yearning for offspring! Really, to live here for a month or two might ensure success to a figure of marble. And what is it that works these miracles? "Kesselbrunnen" and "Kränchen"! Magical springs! And what protoplasm do they contain? Bicarbonate of soda, twelve grains to the pint; and chloride of sodium, six grains to the pint! Now, is life a chemical process, which can reproduce itself out of such fare as this? Has it not a mineral basis, like agriculture? And which is the easiest: to suckle a babe upon water, or to beget a babe upon such minerals? This is no frolic, but a serious medical question: What is the rationale of the effect of the waters of Ems in increasing population? "Perhaps Professor Schaaflhausen of Bonn will answer the question in a future physiological section meeting," quoth I to my inquisitive friend. As he believes in spontaneous generation, he will have less difficulty in explaining the effect of the waters of Ems, containing minerals, than in explaining his observations of the spontaneous

growth of protococcus cells in distilled water, inside hermetically sealed glass tubes.

It being time for dinner, we completely disappeared for a time within the Hotel d'Angleterre, and there we dined splendidly for an hour and a half; drank fine wines at fine prices; heard music of the best; then saw and met fine company in the Kurgarten. "So you see they do not live on watery minerals alone," said my friend of the inquisitive turn, knowingly punching my obdurate sides. I had had a medical lesson upon the restorative powers of Ems. Anybody with a long purse may be sent there. If he is not exactly cured, he is sure to come back pleased; and that is worth a great deal in these dreadful times of nihilism.

How matters grew on the morning of the 19th of September will reflect itself immediately in my style; and I will, therefore, rely upon this faithful mirror, rather than upon a special attempt at description. The Sections met in earnest. The mineralogists and geologists had a fine meeting. After Ludwig had described the formations of the Rhenish basin, G. Rose gave a splendid lecture on the Description and Classification of Meteorites. The meteorites are of two kinds—iron and stone meteorites. The iron meteorites show again three varieties, and the stone meteorites seven. Thus there are ten varieties of these aerial messengers to our earth; and in one of them Rose discovered a new crystallised mineral, the rhabdite. The Sections for Psychiatric and State Medicine discussed the arrangements of a new agricultural colony for lunatics at Hildesheim. State medicine proper was quite neglected.

The Section for Mathematics and Astronomy confined itself entirely to the former branch, and did not discuss any celestial objects. The Section for Physics discussed W. Thomson's Bottle-Electrometer, and listened to an interesting demonstration and lecture by Professor Reusch of Tübingen on Singing Flames. Then the Section adjourned to the Chemical Section, where curious things had passed. Heraeus had in ten minutes, with the aid of a little gas-flame and some oxygen, melted a pound and a half of platinum, and cast a form with it. This had been attained simply by using a crucible of burned lime, the worst conductor of heat known. The chemists now vacated the seats to the Physical Section, to enable them to see the remarkable experiment repeated. When the Chemical Section was reorganised, after several interesting theoretical papers, Liebreich gave a *resumé* of his researches on the Composition of the Brain of Man and Animals. He said that the brain consisted almost entirely of one single chemical substance, which, by washing with ice-cold water, could be freed from adhering impurities, and afterwards dissolved in ether. The ether contained also cholesterine. The new substance the author termed "protagon"; it contains carbon, hydrogen, nitrogen, and phosphorus. The substances commonly enumerated as immediate principles of the brain are products of decomposition of this protagon. The archencephalists were much disquieted by the news that the chemical composition of the brain of animals was the same as that of man. The Botanical Section divided the species *Sempervivum* in two; listened to a description of the Garden for forestic experiments near Brunswick (Professors Jessen and Forstrath Hartig); appreciated Professor Sachs's experiments on the effects of variously coloured light upon certain phenomena of vegetation; and admired the acute observations of Hofmeister on the mechanism of the movements of the protoplasm. This movement was warmly disputed in the discussion, after which the meeting closed.

In the Zoological Section, many short communica-

tions of special interest were made. The acclimatizers and marine animal breeders will be glad to hear that the sponge, so essential for the comfort of our faces and bodies, has been reared successfully on the coast of Dalmatia; and that the experiment, as Dr. O. Schmidt communicated, is to be further extended. But the most grotesque animal was exhibited by Professor Leuckart: it was a fish with only one thousand eyes distributed over the whole of its body. This great robber bears the name of *Chauliodus Sloani*. It has teeth like a viper, lining its voracious mouth like a railing. In the ordinary place on the head, it bears two principal eyes; and on the lingual bone, between the gills, round the covers of the gills, on all prominences of bones, along both sides of the abdominal surface to the end of the tail, it bears magnificent black subsidiary eyes. I have examined some of these eyes microscopically; they are composed of a large transparent lens, a vitreous, a choroid with a magnificent black layer of pigment-cells; and in the fundus of each eye a special optic nerve enters. Professor Claus drew attention to a similar occurrence and position of subsidiary eyes in a kind of crayfish, *Euphausia*.

In the Section for Midwifery and Diseases of Women, Professor Dohrn made a communication on the Shape of the Basis of the Thorax in Pregnant Women and New-born Children. He confirmed the observation of Küchenmeister, found by spirometry, and further supported by Fabius and Wintrich, that the capacity of the lungs is not diminished during pregnancy, but that the basis of the thorax becomes much wider, thus indemnifying the lungs for the loss in height. Then there ensued discussions and communications of no interest to any one, until Professor Winckel recommended that, if women had to be confined with the aid of the forceps, they should lie on their side. This proposition contains no novelty to my readers, as this position on the side is habitual in England, where also most deliveries take place while the parturient woman is lying on her (left) side. I can say from experience, that in sundry light cases the use of the short (Smellie's) forceps may be quite easy while the parturient person is on her side; but it is not so when the long forceps has to be used. For that the dorsal position is far preferable. I am also quite certain that, in the lateral position, both natural labours and forceps deliveries lead much more frequently to ruptured perinæum than in the dorsal posture; and that no labour should be allowed to be completed without the parturient woman is either on her back with her legs apart, or on her side with a pillow or bolster between her knees, to keep her thighs sufficiently apart, should she not restrain herself sufficiently to keep them flexed towards her abdomen. I believe, therefore, that the accoucheurs of both nations may, in this respect, learn something from each other.

The communications in the Section for Medicine began with a short lecture by Professor Barthels of Kiel, on the Excretion of Carbonic Acid in Diabetes Mellitus. He said that, in this disease, the temperature of the body was always below the normal standard. To find an explanation of this, he examined the air expired by diabetic patients, and discovered that it constantly contained about half a per cent. less of carbonic acid than the expired air of healthy persons. The discussion then made vagaries upon the large topic of the treatment of diabetes. Beneke of Marburg desired to know the effect of sulphate of soda or Karlsbad water. Pfeuffer of Munich said that the physicians at Karlsbad were not sanguine as to the curative power of their water over diabetes, as he had heard when lately there. But the water diminished the sugar, and made them feel generally

better. The rest of the discussion, in which Drs. Weber, Rosenstein, Remak, Barthels, Ludwig Auerbach, Heldman, Pfeuffer, and Stiebel participated, was desultory and somewhat of a disgrace, one speaker deriving diabetes from disease or wounds of the fifth ventricle of the brain. The meeting then adjourned to the clinical theatre of Professor Seitz, to see the application by Professor Remak of the constant electrical current to cases of neuroparalysis. Professor Remak's apparatus is a great battery, containing some fifty elements of his own, an improvement of Daniell's elements. It runs on wheels, and can be drawn by one person; but to bring it into a house or up a staircase requires two. Its weight is between three and four cwt. He applied a constant current to a woman of thirty-eight years of age, who suffered from paralysis of the ilio-psosæ and orbiculares oculorum; the paralysis being probably a so-called hysterical one—that is, caused by chronic ascending sympathetic neuritis. A current of twenty-five elements, conducted through the ilio-psosæ for fifteen minutes, caused a little return of power in the right leg, which she could raise for some inches from the bed; no improvement in the left. A similar application to the eyes enabled her to close the lids once or twice. A second case of paralysis from meningitis was rejected as unsuited to the treatment. A third case, diagnosed as *tabes dorsalis superior*, seat of the lesion on the left side of the spinal marrow, between the third and fourth vertebrae, was treated for five minutes with a constant current from thirty-eight elements. While the patient had before been unable to mount a chair with the left foot, and on closing his eyes had shaken strongly, so as to be in danger of falling, after the application he could mount a chair with the left leg repeatedly and without effort, and stand firmly with his eyes closed.

The Section for Anatomy and Physiology was the most successful of all, and remained so up to the last day. It sat daily for four or five hours, and was always well attended to the last moment. Its business began with a communication by Dr. Stein of Frankfort, on the Circulation in the Kidneys; the point of which was, that the capillaries which accompany the tortuous tubules arise from further splitting up of arteries which have left the glomeruli. Professor Gerlach of Erlangen spoke on the photographing of microscopic preparations. He discussed the several methods of Swan, and then showed a new method which employed carminate of ammonia, thus enabling the histologist to give to injected preparations at once the colour which they bear. The blue aniline colour can be similarly used for blue preparations. This method is, indeed, to be called "photochromographing". Dr. Kehrle of Giessen next showed that the corpora lutea from the ovaries of various mammals are identical in weight and size in the same class of animals, whether they are gravididatis or menstruationis. During pregnancy, the last corpus luteum is not changed, but only during the puerperal state. The ovaries mostly alternate in furnishing the egg. In multiparous animals, one ovary furnishes a larger, the other a smaller, number of eggs. Thus the observation of the corpora lutea leads to the knowledge of the laws of ovulation. Professor Dursy of Heidelberg spoke of the embryonal formation of kidneys and sexual organs, known as Wolff's body. He distinguished two kinds of canals—those which opened into the great duct, and those which did not. These latter, he said, confirmed the discovery of Henle of the loop-shaped or recurrent uriniferous tubules in the kidneys. Dr. Thudichum of London made a communication on the Colouring Matter of Bile. The red modification—cholerithrine—which, combined with alkali, was yellow, and then consti-



tuted the bilifulvin of Berzelius, he had analysed, and found to have the formula  $C^{18}H^9NO^4$ . This passed into the green modification, or cholochloine, by doubling its equivalent, and taking up two equivalents of oxygen— $2(C^{18}H^9NO^4) + 2O = C^{36}H^{18}N^2O^6$ . He explained the nature of the test for biliary colouring matter with red nitric acid; and showed that, as the cholerythrine and its derivatives contained no iron, the assumed derivation from the colouring matter of the blood was not substantiated.

The Section for Surgery was opened with a lecture by Professor Roser of Marburg on the Operation for Empyema. He said that hitherto three objections had been made to this operation: 1. That air might enter the thorax; 2. That the exudation might re-form; 3. That the lungs re-expanded but little, or not at all. He showed, on the contrary, that air had to be injected into the cavity of the thorax, in order to get the pus completely expelled; the purulent cavity then became quickly smaller, and the lung expanded surprisingly. As the natural opening of empyema mostly takes place near the sternum, Roser proposed to open anterior encapsuled empyemas in front, near the region of the heart. He related two successful cases. An empyematic fistula, of eight years' standing, he cured by making resection of a piece of the hypertrophied rib, which prevented the efflux of the pus. A hepatic abscess, which had burst into the pleura, he emptied by cutting through the latissimus dorsi. He recommended, when necessary, to excise a piece of rib. All empyemata require the constant use of the catheter, and the free admission of air, to assist in the expulsion of the pus. Already, Dieffenbach had insisted on a simple spacious incision for the cure of empyema. Dr. J. Glück of Kashau related a case of excision of two hypertrophied breasts from a Hungarian girl aged 16. The tumours weighed 21½ pounds. After Drs. Königsfeld and Adelman had shown and explained the use of two apparatuses for fractures of the neck of the thigh and of the leg, the Section broke up. At one o'clock, the scientific labours of all the Sections announced for the 19th of September terminated.

[To be continued.]

**VIRCHOW'S COUNTERBLAST.** After a lecture recently given to the Operatives Society at Berlin, by Professor Virchow, on the danger attending the use of tobacco, twelve young men stepped forward and declared that they would thenceforth smoke no more, and would devote the money thus saved to effecting an insurance on their lives. (*Daily Paper*.)

**LUNATICS IN ENGLAND AND WALES.** The number of insane patients confined in county asylums, work-houses, and licensed houses, in England and Wales, on January 1st, 1863, was as follows:—Private patients, maintained at their own or their friends' expense, 5,341, of whom 3,042 were males and 2,299 females; paupers, maintained at the expense of counties, unions, etc., 36,638. In some of the returns of pauper insane the distinction of sex is not set forth, but in such of them as give it, the proportion appears to differ considerably from that of private patients. With the private cases (those maintaining themselves, or who are maintained by friends), as will be seen above, there are more men than women insane; with the pauper class the order is reversed, and lunacy is more frequent amongst women. There was a total number of private and pauper insane of 41,979; to which, however, may be added 877 criminal lunatics confined in asylums, hospitals, etc.—viz., 677 men and 200 women—showing another variety of proportion as regards the sexes.

## Association Intelligence.

### MEDICAL PROVIDENT FUND.

THE following is the list of Directors of the Medical Provident Fund, elected up to the present time. The first meeting was held at the Freemasons' Tavern, in London, on Thursday last.

*Chairman of the Board, elected by the Association:*

Benjamin W. RICHARDSON, M.D., London

*Elected by the Committee of Council:*

George BURROWS, M.D., F.R.S., London

H. D. CARDEN, Esq., Worcester

R. B. CARTER, Esq., Stroud

T. HECKSTALL SMITH, Esq., St. Mary Cray

(One vacancy.)

*Elected by Branches:*

*Bath and Bristol Branch:*

William BUDD, M.D., Clifton

R. W. FALCONER, M.D., Bath

*Birmingham and Midland Counties Branch:*

Edwin BARTLEET, Esq., Campden

John CLAY, Esq., Birmingham

G. FAYRE, M.D., Henley-in-Arden

*Cambridge and Huntingdon Branch:*

Peter W. LATHAM, M.D., Cambridge

*East Anglian Branch:*

B. CHEVALLIER, M.D., Ipswich

Edward COPEMAN, M.D., Norwich

*East York and North Lincoln Branch:*

Sir Henry COOPER, M.D., Hull

*Lancashire and Cheshire Branch:*

L. E. DESMOND, M.D., Liverpool

George SOUTHAM, Esq., Manchester

Edward WATERS, M.D., Chester

*Metropolitan Counties Branch:*

Charles F. J. LORD, Esq., Hampstead

Edward H. SIEVEKING, M.D., London

A. P. STEWART, M.D., London

*Midland Branch:*

Edwin MORRIS, M.D., Spalding

William OGLE, M.D., Derby

Thomas PAGET, Esq., Leicester

*North Wales Branch:*

T. Taylor GRIFFITH, Esq., Wrexham

*Reading Branch:*

George POUND, Esq., Odiham

*Shropshire Ethical Branch:*

(No return.)

*Shropshire Scientific Branch:*

Samuel WOOD, Esq., Shrewsbury

*South-Eastern Branch:*

John ARMSTRONG, M.D., Gravesend

Henry COLLET, M.D., Worthing

Edward WESTALL, M.D., Caterham

*South Midland Branch:*

John M. BRYAN, M.D., Northampton

Edward DANIELL, Esq., Newport Pagnell

Henry VEASEY, Esq., Woburn

*South-Western Branch:*

Thomas L. PRIDHAM, Esq., Bideford

(Two vacancies.)

*West Somerset Branch:*

(Election not yet made.)

*Yorkshire Branch:*

W. D. HUSBAND, Esq., York

(One vacancy.)

DR. RICHARDSON begs to announce the following contribution to the Guarantee Fund—

|  | £  | s. | d. |
|--|----|----|----|
| Amount already contributed.....          | 3  | 1  | 0  |
| Dr. Fayer, Henley-in-Arden.....          | 10 | 10 | 0  |
| Further contributions will be announced. |    |    |    |

### SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will be held at the West Kent General Hospital, at Maidstone, on Friday, October 28th, at 2.15 P.M.

Dinner will be ordered at the Mitre Hotel at 5 P.M. Tickets, 5s., exclusive of wine.

Dr. MONCKTON has consented to occupy the Chair; and papers are promised by Fred. Fry, Esq., F.R.C.S. (Severe Injury to Brain: patient surviving thirteen months); and by G. H. Furber, Esq. (Spontaneous Evolution of the Full-grown Fœtus).

FREDERICK J. BROWN, M.D., *Hon. Sec.*

Rochester, October 14th, 1864.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

A MEETING of the above Branch was held in the Medical Department of the Birmingham Library, on Thursday, October 13th; JAMES RUSSELL, M.D., President-elect, in the Chair. There were also twenty-one members present.

*New Members.* The following gentlemen, having been previously elected members of the Association, were elected members of the Branch:—T. J. Aubin, Esq., Kingswinford; J. H. T. Bailey, Esq., Coleshill; Chas. S. Boswell, Esq., Redditch; G. H. Fosbrooke, Esq., Bidford; George E. Horton, Esq., Dudley; John Manley, Esq., West Bromwich.

*Medical Provident Fund.* After a very lengthened discussion, the following gentlemen were elected Directors of the Provident Relief Fund:—Edwin Bartleet, Esq., Camden; John Clay, Esq., Birmingham; and George Fayer, M.D., Henley-in-Arden.

*Paper.* Dr. WADE read a very able paper on the Production of Heart Diseases by Violence, with Cases illustrative of the different Varieties of Disease determined by Sudden Over-exertion and Accidents.

### WEST SOMERSET BRANCH: QUARTERLY MEETING.

A QUARTERLY meeting was held at Clarke's Castle Hotel, Taunton, on Thursday, October 13th, 1864, at 7 P.M. Present: J. H. KINGLAKE, M.D., in the Chair; Messrs. Randolph, Legge, Alford, H. J. Alford, W. Liddon, and Dr. Kelly.

*Next Annual Meeting.* It was resolved: "That the next annual meeting be held at Clarke's Castle Hotel, Taunton; and that Hugh Morris, Esq., of South Petherton, be President-elect."

*Medical Provident Fund.* It was resolved: "That the Branch is not at present prepared to nominate a Director to the Provident Relief Fund."

*Papers.* 1. Mr. LEGGE read a paper on Scarlatina, as it had fallen under his observation in the neighbourhood of Wiviliscombe during a recent epidemic. This interesting paper was accompanied by an elaborate table containing details of ninety cases. A long discussion followed, and Mr. Legge was thanked for his communication.

2. Mr. W. LIDDON exhibited Preparations of two Eyes which he had lately removed, one on account of Malignant Disease, and the other of Extensive Injury from an accident. The cases and operation were shortly described.

3. Dr. KELLY described a Remarkable Birth, where the fetus presented the appearance of, and was mistaken for, a monstrosity without face or limbs; it having been born so closely enveloped in transparent

membranes, from which the liquor amnii had escaped, that the placenta covered the face and anterior surface of the child, hiding its features and limbs, and seeming to have grown to it. It was only on minute inspection that the discovery of the real state of things was made out, and, unfortunately, after the death of the imprisoned fetus had taken place.

4. Dr. KELLY gave the history of a case in which Barnes' Dilators were successfully used for inducing Premature Labour. The apparatus was shown and explained.

### CAMBRIDGE AND HUNTINGDON BRANCH: MEETING.

A MEETING of this Branch was held at Cambridge on October 13th; G. E. PAGET, M.D., in the chair. There were also present: J. Carter, Esq. (Cambridge); C. P. Daniell, Esq. (Swavesey); M. Foster, Esq. (Huntingdon); G. L. Girling, Esq. (St. Ives); Dr. Green (Cambridge); Dr. Latham (Cambridge); and Dr. Pinchard (Cottenham).

The following resolutions were passed.

"That P. W. Latham, M.D., be appointed the representative of the Branch on the Directorate of the Medical Provident Fund."

"That it is not desirable that the age of contributors to the Provident Fund be limited to 60 years. That the representative of the Branch be requested to communicate this resolution to the Board of Directors."

"That the next annual meeting be held at Ely."

"That John Muriel, Esq., be President-Elect."

## Correspondence.

### TREATMENT OF PARTURIENT WOMEN.

LETTER FROM THOMAS POPE, ESQ.

SIR,—I should not have noticed Dr. Hewitt's reply to my letter, if etiquette were out of the question; but as he has asked me a question, it necessitates an answer.

In that part of my letter where I speak of the deranged state of the digestive organs at and before the time of labour, he says, "May I ask Mr. Pope for the proof of this?" and then goes on to say, "Women are, as a rule, capable of eating a good dinner, and digesting it easily and comfortably, up to the very time when labour begins." My answer to this is, "Exceptio probat regulam"; for the general rule is, that all parturient women have anorexia, flatulence, and all the other symptoms, more or less, of derangement of the digestive function; and the assertion to the contrary, may be characterised as "*Rara avis in terris nigroque simillima cygno*."

And now, I would advise Dr. Hewitt to ponder well my letter; and, unless he can say something more to the purpose, to come over to my way of thinking in this matter; for, assuredly, as regards the state of the stomach, etc., and milk-fever, he will prove himself thereby a better friend to the parturient daughters of Eve. *O magna vis veritatis.*

I am, etc.,

THOMAS POPE.

Clebury Mortimer, Shropshire, Oct. 16th, 1864.

### LETTER FROM WILLIAM LEGGE, ESQ.

SIR,—I am glad to see the attention of our associates drawn to so important a subject as the diet of child-bed, on which, unfortunately, so great a difference of opinion exists; for my own part, a rather ex-



tensive midwifery experience induces me, unhesitatingly, to declare my adhesion to the views of Dr. Graily Hewitt. We cannot wonder that, a rigorously low diet being considered indispensable to the treatment of severe disease by the past generation of practitioners, should by them be enforced in the management of the puerperal state; parturition they regarded, not as a natural physiological process, but as an abnormal occurrence requiring active interference. In the present day, we recognise the fact that the first step towards the rational treatment of natural labour, is at once to dismiss the idea that we are dealing with disease; we shall then see the necessity of aiding the system to rally from the exhaustion consequent upon the severity of the parturient process, and proportioned to the amount of hæmorrhage by which it is succeeded; and, here bearing in mind the great physical exertion undergone, and the drain upon the system yet to ensue when the mammary secretion is established, common sense suggests that the diet should be suited to the patient's requirements, sufficiently substantial without being stimulating. The pints of gruel, alternating with pints of tea, to which, in former days, lying-in women were for weeks restricted, were the fruitful source of flatulence, tiresome perspirations, and irritation of the skin.

With a liberal diet, there is little fear of our encountering milk-fever or abscess of the breast; when the milk is in process of secretion, so far from finding it necessary to keep the patient low, I believe the tendency to milk-fever will be in the inverse ratio to the nourishment administered; and that nothing is so productive of what, in our west country, is known as "breast-ill", as defective nutrition. A proof of this is afforded by the much greater frequency with which the poor, who are compelled to depend upon tea and gruel, suffer from inflammation of the breast.

So strongly do I feel the importance of this subject that, some time since, I prepared a paper relating to it, to read at a Branch meeting. Being then prevented attending, I only refrained from producing it subsequently, as meanwhile all I had to say was said so much better by Dr. G. Hewitt, and backed by his own high authority, could not fail, I thought, to produce an impression on our brethren; and I trust that the present discussion may deepen that effect, and give evidence thereof in the conversion of Mr. Pope and many others.

I am, etc.,

WILLIAM LEGGE.

Wiveliscombe, Oct. 17th, 1864.

[Mr. Legge would, in our opinion, confer a benefit on the Association by publishing the paper referred to by him. The question is a purely practical one, the calm discussion of which, in the manner so well exemplified in this letter, may usefully engage the attention of the profession. [EDITOR.]

### INTRAOCULAR MYOTOMY.

LETTER FROM J. VOSE SOLOMON, ESQ.

SIR,—The letter, signed "Jabez Hogg", in the JOURNAL of Oct. 8th, raises the following questions, to which I will give categorical answers, leaving, without further comment, the ethical part of the controversy to the decision of the profession upon the facts which have been laid before them.

1. With whom originated division of the ciliary muscle as a remedy for eye-tension?

Answer. Myotomy of the ciliary (the term myotomy being restricted to the sense in which it was understood prior to the introduction of subcutaneous section of muscle) originated, without question, with Dr. Whyte, in the year 1861 (BRITISH MEDICAL JOURNAL,

vol. i, p. 450, 1863). Whyte cut the muscle transversely *behind* the iris.

2. Has myotomy of the ciliary, confining the term to the preceding sense, been practised by any other?

Answer. Yes; by Dr. von Gräfe, in the performance of iridectomy for glaucoma, 1856-57. In this operation, the muscle is cut *transversely*, and in *front* of the iris.

3. Who first methodised and practised division of the ciliary muscle for the relief of glaucoma, in the sense in which the terms "division, etc." are employed by Mr. Hancock, but rejected by all writers on orthopædic surgery, and by Bowman, Nunneley, and Follin, who have dissected the ciliary muscle; viz., a puncture or "incision" of muscle made *parallel*, instead of at a right angle, with the course of the principal fibres?

Answer. Without question, Dr. Desmarres, who, in 1847, illustrated the subject clinically, under the title of Paracentesis of the Sclerotic, in his *Traité des Maladies des Yeux* (BRITISH MEDICAL JOURNAL, vol. i, 1863, p. 451.)

4. By whom was Desmarres' practice introduced into London?

Answer. By Mr. Hancock, who commences his incision or puncture rather nearer to the margin of the cornea; but, in all other particulars, carries out to the letter the directions given by the Parisian oculist. (JOURNAL, 1863, vol. ii, p. 579.)

5. Who first devised myotomy of the ciliary for the relief of myopia and eye-tension, in the sense in which the term division of muscle or tendon was employed by Stromeyer and Little, and is now universally accepted by the profession; viz., the subcutaneous division of muscle or tendon in a direction *contrary* to the course of the principal fibres?

Answer. The humble individual whose signature appears to this note.

In this operation (*Intraocular Myotomy*), the division of the muscle is not nominal but surgical. To use Dr. Follin's term, there is no "illusion." The muscle is enfeebled; an important neurotomy is effected. *The incision does not radiate from the margin of the cornea; but is parallel with one of the equators of that membrane. Hence, the diameter of the eyeball is not enlarged; and vitreous humour is seldom lost, unless it be disfluent. The base of the iris, the ciliary nerves, and perhaps filaments of the fifth pair, are divided in the same situation, direction, and to a similar extent, as in iridectomy.* (See, for diagrams exhibiting the direction of the incision in Whyte's, Desmarres', and my own operation, my papers published in the JOURNAL in 1863 and 1864.)

I must decline further correspondence upon this subject.

I am, etc.,

J. VOSE SOLOMON.

36, Newhall Street, Birmingham, Oct. 16th, 1864.

### SPONTANEOUS EVOLUTION.

LETTER FROM WILLIAM SUPPER, ESQ.

SIR,—Thinking a well marked case of the above occurrence might be interesting to some of your readers, I have ventured to trouble you with a short account of one which occurred to myself.

On Sunday, October 9th, 1864, I was sent for to attend Mrs. H. in her sixth pregnancy. She is a tall and powerfully built woman, and has always had good and quick previous labours. I arrived at 7 P.M.; found the membranes ruptured, and vertex presenting. At 7.30, the first child (female) was delivered; and its placenta quickly followed. On passing my hand over the abdomen, I found the uterus still distended; and, on examining, found the second

bag of membranes protruding, but flaccid, and with it the hand of the child. I endeavoured to return it; but, the pains being violent and with hardly any intermission, was unable to do so. The arm and shoulder quickly followed. I introduced my hand into the uterus, hoping to seize a foot; but the violence and frequency of the pains compelled me to desist. I waited some time, hoping they would moderate; but, the action continuing, the breech became jammed into the brim. The hand and arm still protruded. In about five minutes, the breech and right arm were completely expelled from the pelvis, the rest following immediately. A dead male child was the result.

I think this case fully accords with the views entertained by many members of the profession—that where we have a large and capacious pelvis, with the parts thoroughly relaxed, we are justified in letting Nature supersede us, and avoid in many cases an unjustifiable and dangerous amount of force.

I am, etc., WILLIAM SOPER.

1, St. George's Villas, Stockwell Road, October 1864.

## Medical News.

**ROYAL COLLEGE OF PHYSICIANS OF LONDON.** At a general meeting of the Fellows, held on Wednesday, October 19th, 1864, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Barbet, William Lewington, Hungerford  
Barnston, Nicholas William, Peninsular and Oriental Company's Service  
Belcher, Joseph Silverthorne, M.D., St. Andrews, 3, New Road, Wellclose Square  
Burman, William Maxwell, Walth-upon-Thorne  
Chippendale, Walter, M.D., St. Andrews, Palermo, Sicily  
Cobbett, Anthony Charles, 34, Tachbrook Street, Finsbury  
Faines, John, Davey, Burton-on-the-Water  
Ferguson, Frederick Stuart, M.D., Edin., Belton  
Gray, John Temperley, 1, Portland Terrace, Daiston Lane  
Hodge, Benjamin Terry, Sidmouth  
Latter, James, St. George's Hospital  
Leigh, Thomas, St. George's Hospital  
Merry, Robert Rosier, Chelmsford  
Oliphant, John, M.D., Edin., 24, Alfred Street, Bedford Square  
Phillips, John Jones, Guy's Hospital  
Puzey, Chauncey, Guy's Hospital  
Schmid, Carl Theodor, M.D., Tübingen, 33, Edwards Square, Kensington  
Williams, John David, Bala, North Wales

The following gentlemen were reported by the examiners to have passed the Primary Professional Examination:—

Bradshaw, Paris, King's College  
Harrington, William, University College  
Nowell, Richard, Battersea, Guy's Hospital  
Rennell, William Alfred, Manchester  
Rogers, Charles Edward Heron, Middlesex Hospital  
Sawyer, John, Middlesex Hospital  
Tindall, Alexander Melvor, St. Bartholomew's Hospital  
Webb, John Holden, St. Mary's Hospital

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.** The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board, on the 19th instant.

Bailey, William, Tipton, Staffordshire; diploma of membership  
Baker, John, Attercliffe, Nottingham Hall, April 26, 1864  
Barnard, Thomas, Philbert Street, Islington; July 27, 1864  
Jones, Alfred Orlando, Milner Square; May 13, 1864  
Langworthy, George Vincent, Modbury, Devon; April 27, 1864  
Lawrence, Henry Cripps, Kingston-on-Thames; July 27, 1864  
Owen, Robert Edward, Beaumaris; May 12, 1864  
Pearson, Charles, Brompton, East Grinstead, January 26, 1864

Powdrell, John, Farndon, near Chester; April 27, 1864  
Thompson, William Allyn, Oxford; May 2, 1864  
Ward, Martindale Cowslade, Markham Square, May 10, 1864  
Wills, Charles James, Stockwell; May 24, 1864  
Yates, William, Richmond; April 27, 1864

**UNIVERSITY OF CAMBRIDGE.** Degree of M.D.  
Laving, Robert

**APOTHECARIES' HALL.** On October 13th, the following Licentiates were admitted:—

Carreg, Griffith Llewelyn, Birmingham  
Herbert, Henry Carden, Castle Island, co. Kerry  
Pyle, Charles John, Amesbury, Wilts  
Smith, John Ablewhite, Louth, Lincolnshire  
Worger, Thomas Hewlett, Kent and Canterbury Hospital

At the same Court, the following passed the first examination:—

Leigh, Thomas Drake, Royal Infirmary, Liverpool

## APPOINTMENTS.

### ARMY.

ALDER, Assistant-Surgeon S., 62nd Foot, to be Staff-Assistant-Surgeon, *vice* J. Mackenzie, M.D.  
ARMSTRONG, Assistant-Surgeon L., M.D., 13th Hussars, to be Staff-Surgeon, *vice* H. Franklin.  
EKIN, Assistant-Surgeon J., M.B., 4th Foot, to be Staff-Surgeon, *vice* G. Saunders.  
ELLIOTT, Staff-Surgeon-Major R. C., C.B., to be Deputy Inspector-General of Hospitals.  
FERRIS, Surgeon-Major G. T., Royal Artillery, to be Staff-Surgeon-Major, *vice* H. B. Franklin.  
FRANKLYN, Staff-Surgeon H. B., to be Surgeon Royal Artillery, *vice* G. T. Ferris.  
GIBB, Staff-Surgeon-Major A., M.D., to be Deputy Inspector-General of Hospitals, *vice* J. Mount, C.B.  
JOHNSON, Staff-Assistant-Surgeon F., M.B., to be Assistant-Surgeon 13th Hussars, *vice* L. Armstrong, M.D.  
MACKENZIE, Staff-Assistant-Surgeon J., M.D., to be Assistant-Surgeon 62nd Foot, *vice* S. Alder.  
MOUAT, Deputy Inspector-General J., C.B., to be Inspector-General of Hospitals.  
SHAW, Staff-Assistant-Surgeon J. A., M.D., to be Assistant-Surgeon 4th Foot, *vice* J. Ekin, M.B.  
TIPPITS, Staff-Assistant-Surgeon A. M., to be Staff-Surgeon, *vice* R. C. Elliot, C.B.

### ROYAL NAVY.

COOKE, George P., M.D., Surgeon (additional), to the *Duncan*.  
EDMONDS, Henry, Esq., Surgeon (additional), to the *Isard*.  
ELLIOT, John, Esq., Surgeon, to the *Excell*, for the *Royal Sovereign*.  
KIPLING, Thomas, Esq., Assistant-Surgeon, to the *Duncan*.  
MC'CLEMMENT, Richard C., Esq., Assistant-Surgeon (additional), to the *Duncan*.  
MANGLE, Robert, Esq., Surgeon (additional), to the *Duncan*.  
NIBILL, John, M.D., Surgeon, to the *Duncan*.

**VOLUNTEERS.** (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

BURTON, R. G., M.D., to be Surgeon 21st Kent R.V.  
DOLMAN, A. H., Esq., to be Assistant-Surgeon 1st Derbyshire R.V.  
FROST, T., Esq., to be Assistant-Surgeon 4th Yorkshire A.V.  
MATHER, G. R., M.D., to be Assist.-Surgeon 1st Lanarkshire A.V.  
MEADE, H., M.D., to be Assistant-Surgeon 5th Yorkshire A.V.  
MITCHELL, E., Esq., to be Assistant-Surgeon 1st Administrative Brigade Caithness-shire A.V.  
JOHNSTON, T., Esq., to be Assistant-Surgeon 19th Lanarkshire R.V.  
SMITH, A. W., M.D., to be Honorary Assistant-Surgeon 1st Lanarkshire A.V.  
STEPHEN, W., Esq., to be Honorary Assistant-Surgeon 1st Aberdeenshire A.V.  
WATSON, J., Esq., to be Surgeon 1st Newcastle-upon-Tyne R.V.

## DEATHS.

DIAMOND, On October 11th, at Thurlby Hall, Lincolnshire, aged 2 months, Rosa Jane, daughter of Warren H. Diamond, M.D.  
HALFORD, Edward, Esq., Surgeon, at 1, City Road, aged 45, on October 12.  
LONG, HENRY, M.B., 2nd Regiment, at Bermuda, on August 21.  
LOVER, William, M.D., in Dublin, aged 57, on August 23.  
MACLEAN, Charles, M.D., late Inspector-General of Hospitals, at Bathurst, Dublin, aged 71, on October 1.  
MILROY, David, M.D., 80th Regiment, at Bermuda, on Sept. 3.  
RUSSELL, Wm., M.D., at Lausanne, aged 23, on October 2.  
SKEGG, Robert, Esq., Surgeon, at St. Martin's Place, aged 60, on October 17.

**BEQUEST.** A Miss Clements has left £30,000 to be divided amongst the charities of Liverpool.



**NEW GERMAN HOSPITAL.** On Saturday last the new German Hospital at Dalston was opened by his Royal Highness the Duke of Cambridge.

**DINNER TO DR. EWART.** A public dinner was lately given to Dr. Ewart on the occasion of his leaving Middleton in Teasdale, and a gold watch presented to him.

**THE OLD SAD TALE.** We regret to learn that cholera is very bad among the men of the 20th Regiment, although there is no disease anywhere else. Their huts are said to be too crowded, and badly ventilated.

**BIRMINGHAM GENERAL HOSPITAL AND THE MUSICAL FESTIVAL.** At the weekly board, held on Friday week, the further munificent sum of £2000 was received from Colonel Mason, the chairman of the Musical Festival Committee, on account of the proceeds of the late festival, making altogether £5000 which have been paid to the funds. (*Birmingham Gazette.*)

**REGISTRATION OF STUDENTS.** The annual registration of students pursuing their studies at the eleven Metropolitan Schools, has just been concluded at the Royal Colleges of Physicians and Surgeons, and at Apothecaries' Hall, and it is stated that, there is some falling off in the gross number, and that at only three schools is there a slight increase over last year.

**UNIVERSITY OF CAMBRIDGE.** Dr. Paget (Caius), Dr. Dickenson (Caius), Mr. Lestourgeon (Trinity), and Dr. Latham (Downing), have been appointed examiners in medicine; Dr. Humphry (Downing), and Mr. Lestourgeon (Trinity), examiners in surgery. Dr. Drosier (Caius), has been appointed deputy-professor of anatomy, on the nomination of Professor Clark.

**BANTINGISM.** Mr. Banting is in great force—the accession of Alderman Mechi to his ranks having had a good effect on the recruiting. A gentleman recently wrote to him announcing that he had successfully reduced himself by eighty pounds, the largest amount yet known. The Emperor of the French is trying the Banting system, and is said to have already profited greatly thereby.

**HEALTH OF SCOTLAND.** The Registrar-General's monthly return for the eight principal towns of Scotland shows that in September the births, deaths, and marriages were all considerably above the average. The zymotic class of diseases caused about one-third of the deaths (32 per cent.), in Perth, 42; in Greenock, 43; and in Paisley, 47 per cent. The deaths from scarlatina rose in September to 125; but typhus fever was the most fatal of the zymotic diseases; it was most prevalent in Greenock, Aberdeen, Leith, and Glasgow, and caused 155 deaths in the eight towns, among a population not a third of that of the metropolis. The weather was nearly normal during the month.

**REFUSAL OF CERTIFICATE OF DEATH.** A poor woman of Shadwell, made application to Mr. Partridge for redress. Her husband died last Monday, and was attended by Mr. Hawkins, of Colet Place, to whom she applied for a certificate of the cause of death. Mr. Hawkins refused to give her a certificate unless she paid him 6s. She was unable to raise the money, and the undertaker dared not remove the body from the house without a medical certificate. Mr. Partridge directed 412 K, to wait upon Mr. Hawkins, and upon his return, was told that Mr. Hawkins peremptorily declined granting any certificate until he was paid 6s. If the woman were anxious to bury the body of her husband, she had better apply to the parish. The magistrate observed that he could not compel the surgeon to give a certificate. He was very sorry for the poor widow, but he could not help her.

**PUBLIC GENERAL HOSPITAL AT DONCASTER.** A movement to establish a public general infirmary at Doncaster, is received with great favour at Doncaster and the neighbourhood, and at a meeting held on Monday, under the presidency of Mr. Moore, the Mayor, it was announced by Alderman Shirley that upwards of £3,400 had been promised towards the required amount of £5,000 including £500 from the Corporation at Doncaster. Such an institution is greatly needed, inasmuch as from the introduction of machinery in the agricultural districts accidents are of more frequent occurrence. A report, which showed that the governors of the dispensary had agreed to amalgamate with the proposed infirmary, and that a site embracing 2,440 square yards had been selected, was unanimously agreed to.

**POISONING BY YEW-TREE BERRIES.** It appeared that a girl 3 years old, daughter of the gardener to the Finchley Cemetery, was observed by the father to eat one or two of the berries from an Irish yew-tree, but he then thought nothing of the circumstance. Shortly afterwards the child was taken with a kind of faintness. The mother gave her a small quantity of brandy and other restoratives, which seemed to recover her, and she was then put to bed, a dose of castor oil being administered. The deceased, however, relapsed into her former alarming state, and death ensued. Mr. J. White, surgeon, found her dead. On *post mortem* examination, he found in the stomach some partly digested yew-tree berries—from twenty to fifty. He produced some of the seeds, but many of them had passed into the intestines. The husks and seeds were poisonous, but not the fleshy part of the berry. The stomach and intestines were patched and inflamed, showing the irritative action of poison, which was caused by the berries. The coroner remarked that this was a very important case, for yew-trees were thickly planted in all the cemeteries, and by the fact becoming known that the berries were poisonous, greater watch would be kept upon children by those who had them under their care while visiting such gardens.

**OZONE TESTS AND READINGS.** Dr. Allnatt says: "I conclude that bibulous paper, saturated with a solution of iodide of potassium and starch or thin arrow-root, affords the most effective tests we possess. The formula of its preparation is as follows. Take of pure white starch, 1 ounce; iodide of potassium, 3 drachms; mix in a marble mortar, and add gradually 6 ounces of boiling water. The papers to be saturated with the mixture while hot, carefully dried out of contact with the external air, and preserved in close tin boxes." Mr. Lowe remarks: "Assuming that we have adopted the best tests and the most approved method of using those tests, it will be requisite to correct the readings for the velocity of air at the time, for the height of the barometer, for temperature, and for the hygrometrical condition of the atmosphere. It must be borne in mind that if in a given time 1,000 cubic feet of air passing through the ozone-box gives a register of 4, 2,000 feet passing through in the same time will give one of double that amount. Moisture can also increase or diminish the action, a very dry air, or a perfectly saturated atmosphere showing a *minimum*. The lower the barometer descends the more ozone is shown upon the tests. In very hot or very cold weather ozone is also at a *minimum*. With a west there is much more ozone than with an east wind. The *maximum* amount of ozone will occur with a moderately moist atmosphere, a temperature between 50° and 60°, a barometrical pressure under 29 inches, and a gale occurring at the same time. Before the actual amount of ozone can be ascertained, certain corrections must be applied, and until uniformity is

adopted the observations cannot be made comparable. Under these circumstances we can do little more than record much or little ozone.

**THE GRIEVANCES OF DRUGGISTS.** The following is a portion of the address of the president of the British Pharmaceutical Conference held at Bath:—"All the responsibilities of professional men are laid upon chemists without either the dignity or emolument. We are treated as shopkeepers, with profits less than those of an ironmonger. Rich and poor of all grades do not hesitate to consult them in all sorts of difficulties, and obtain freely and gratuitously that for which a physician or consulting chemist would charge a handsome fee. That the information thus freely accorded to all is truly valuable, is proved by the fact of the constancy of the practice, and the needless jealousy of many professional men. To obtain this amount of public confidence, a large expenditure of means, careful observation, energy, study, and integrity of purpose, are required. When the public confidence is secured, it is the interest of the chemist to maintain it by all and every means in his power. Foremost amongst the means are the obtaining good assistants, and making such arrangements in the establishment as shall, as far as practicable, obviate all chances of accident. Having done this, and exercising constant watchfulness, all that a man can do has been done. No regulations could be devised nor Act of Parliament enforced to prevent a physician from making a wrong mark, which might lead to fatal results. The case at Liverpool brings all these considerations before us in the most vivid manner. . . . Is a man to suffer destructive and ruinous spoliation because his assistant is not more than human? It is monstrous injustice. A general practitioner may, and does make numberless mistakes with impunity, because the facts are confined to himself and his own surgery. The eyes of the physician and the public are not on him or his dispenser, to stimulate to vigilance and care; thus few accidents under such circumstances ever see the light, and perhaps it is well it should be so. Without some change in the law, the profession will be abandoned by educated and high-minded men, and their places taken by others, ignorant and reckless, and thus public safety will be jeopardised. The twelve pence now demanded for as many doses of pills, can only be adequately replaced by a sum equal to the fee of the prescriber; for it is clear we have the responsibility of two professions on our shoulders, which ought in common justice to be paid for."

**LEPROSY IN INDIA.** With the appearance of the disorder, all our readers must be more or less familiar. Our streets and bazaars furnish us with terrible illustrations of the ravages which this disease makes on the human face and figure. The disease generally manifests itself at from 20 to 30 years of age, and proves fatal in from twelve to thirty. It is, however, very seldom in itself attended by such results; but it commonly induces a predisposition to other diseases, such as dysentery, low fever, etc., from which the patient generally dies. It is allowed that it more commonly attacks the male sex; but as females can and do conceal the disease, this assertion must be accepted with an allowance. Opinions would appear to be divided, as to whether it attacks Europeans in this country or not. It affects Hindoos and Mahomedans almost equally, and occurs both among high-caste men who eat only vegetables, and low-caste men who eat everything. The disorder is by some attributed to the miserable way in which natives live, in foul unventilated houses, alongside of miasmatic marshes and heaps of all kinds of filth, wearing clothes which they never put off except for a few minutes, when they dip them in some pond, and their generally unclean

habits. But in this some of the writers cannot agree. The disease is considered hereditary. Dr. Paske, of Saharunpore, states that the belief in the hereditary transmission of this disease was so deeply grounded in the minds of the Rajabbeer generally, that they were in the habit of burying alive, not only the leper himself, but all his relatives and friends, lest, in multiplying their kind, the disease should be communicated to distant generations. In Shreenuggur, a similar custom prevailed. Every person affected with leprosy was buried alive, a father burying his son, and a son his father. Although the natives believe that leprosy is contagious, the authors of the reports before us are decidedly of a different opinion. Lepers retain their wives, who are never affected; hospital servants who wash the ulcers of these unhappy sufferers remain free; wealthy lepers entertain men for the same purpose, who wash and dress their sores once or twice a day, and are in constant attendance on them, and are yet untouched by the disorder. Dr. Corbyn, of Bareilly, mentions an instance of a woman, who is a leper, being employed as a cook in a public serai; and she assured him that no objection had ever been made by travellers to food prepared by her. Dr. Paske believes that the discharge from the ulcerative stage, if applied to an abraded surface, would inoculate the individual with whom it came in contact. Dr. Loch, of Mirzapore, and Dr. Annesley, of Jhamsie, report two cases of spontaneous cure, the former of father and son, the latter of two women. In the former case, the boy was wholly cured, the father partially. But, generally speaking, medicine can only check progress, not restore the patient to perfect health. (*Bengal Hurkaru.*)

**THE INDIAN MEDICAL SERVICE DISPATCH.** We can only point to three concessions which Sir C. Wood has chosen to make; viz., the promotion of a number of senior assistant-surgeons; the privilege of counting service qualifying for the rank of surgeon-major from date of first commission; and the new furlough pay-table. All the other grievances, of which the medical service has so long and so loudly complained, remain unredressed. The invidious distinctions between the two services still remain of assigning commissions to the deputy inspectors-general and inspectors-general of the British service, while these grades in the Indian service are declared by the Royal Warrant to be only staff-appointments; of assigning a superior rate of pay to the deputy-inspectors of the British service in India, who are also entitled to retiring pensions and half-pay pensions according to rank, while in the Indian service pensions are still regulated by length of service only. The new pay-table is a delusion; as, with the exception of the surgeon-majors attached to native regiments, the new scale of pay is actually less than the old scale. The half-pay pension of a surgeon-major in the Indian service, after twenty years, is £200, or exactly the same as is given to a surgeon of the British service after ten years! In the grades of inspector and deputy inspector general, the pensions in the British service are regulated by rank, while in the Indian service they are given by length of service only. It can be stated in a very few words what the medical service did look forward to, and what they would have been satisfied with. They expected to receive the effective pay of their relative ranks, with a graduated scale of staff salary similar to that granted to military officers in the new organisation of the army; they also expected to be put on a footing of equality with medical officers of the British service in regard to the commissions and pay of their deputy inspectors-general, as well as to have their pensions regulated by rank, as in the British service. (*Bombay Gazette.*)



# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

### ON THE USE OF THE HYSTEROTOME IN CERTAIN FORMS OF UTERINE DISEASE.

By C. H. F. ROUTH, M.D., M.R.C.P., F.A.C.L.,  
Physician to the Samaritan Hospital for  
Women and Children.

THE use of the hysterotome was first recommended, as far as I know, in 1847, by Dr. Simpson of Edinburgh. That distinguished obstetrician, however, limited its application to cases of stricture or narrowing of the uterine canal—in those cases, in fact, where the dysmenorrhœa present was mechanical. The existence of this cause few, who have much to do with diseases of women, can for a moment deny; yet even here it is remarkable how authors vary. Mackintosh believed them to be of frequent occurrence; his test being the difficulty with which the uterine sound was admitted. Yet we find that Dr. West—an eminent authority, and the latest writer on diseases of women—when speaking of the hysterotome, says: “I am utterly at a loss as to the principle upon which these instruments are recommended. If the cervix uteri be wide enough to admit them, I do not see how its narrowness can offer a mechanical impediment to the escape of the menses. I can, however, readily understand that the uterus may suffer severely from the violence offered to it; and, indeed, have known pelvic abscesses succeed to these manipulations.” (P. 84, last edition.) But, on the other hand, so far as I read him, he does not appear to have himself used the instrument many times. He speaks only of one example in which he employed it; and then it was Stafford's instrument for dividing impermeable urethral stricture, where the internal os had contracted after a severe confinement, and would only admit a small catgut. Years ago, Dr. Oldham, in a paper in *Guy's Hospital Transactions*, on the Mechanical Treatment of Dysmenorrhœa, gave a case where death resulted from peritonitis. In reply to the former, it may be well to state that it is scarcely philosophical to argue from the mistakes of others, when, probably, we have not all the facts, precisely as they occurred, to judge by; and, in regard to the latter, it is notorious that, in some states of the system, very little examination of the uterine organ, even by the sound itself, will produce cellular abscess. In others, again, the mere pulling down the uterus will produce the same result. That cellular abscess may follow the use of the hysterotome, I am free to admit. I have seen two fatal cases of it: one which occurred in a young woman under the care of a colleague; and one which occurred in a patient of my own, a case of fibroid of the uterus, a week or ten days after she left the hospital apparently well, and to which I have already referred in my Lettsomian Lectures. In the first case, the dysmenorrhœa present was very severe. We could not get the smallest catgut bougie in; and we had to wait for a menstrual period, when we succeeded in making this penetrate. The canal was

kept open for a time; and, the period once over, the os was incised, but, unfortunately, with a fatal result; peritonitis and abscess supervening.

I have records of at least twenty-five cases in which I have used the hysterotome, in all of which more or less benefit was derived. In several, a complete cure was effected. But I have used it in several other cases, notes of which I have not kept. Dr. Greenhalgh assures me he has used it in some seventy cases—in only one with much hæmorrhage; but the woman was very plethoric, and it greatly relieved her.

The cases in which I have used it are cases of mechanical dysmenorrhœa, which, notwithstanding the statements of authors, judging from my own experience, I should say, are not so rare as some believe. More frequently they seem to follow long continued cases of endometritis. In many of these cases, sterility has previously existed. In some, pregnancy has very soon followed the use of the hysterotome. I have used it also in cases of retroversion and anteversion; in cases of occlusion of the os, internal or external; in cases of fibrous tumour of the uterus; but most commonly in cases of congestion or very large cervix, as a means of bleeding the uterus, which it does in many cases more effectively than leeches.

I shall add a few words on the *modus operandi* in these several examples.

1. *Cases of stricture of external os and part of cervical canal.* These cases are very simple. The external opening is so small that an ordinary uterine sound cannot be passed. When this is enlarged by a bistoury, and then the os and cervix laterally incised by the metrotome, the disease scarcely ever recurs. This is not usually the case, if the practitioner is satisfied to use the bistoury alone. The relief is marked at first, but does not last.

Where the external os is the locality of constriction, and even occlusion, the treatment is more difficult. Here I have been quite unable to pass the sound or hysterotome farther than into the cervical canal. And some care is requisite; for it is manifest that it is often difficult to know *à priori* whether, after all, we have not to do with an undeveloped uterus; and whether really what we call only cervical canal is in fact not the entire uterine cavity of a uterus which has not enlarged from childhood *pari passu* with the other organs. I have seen this condition several times; and this in women with large breasts, well developed external parts, and strong sexual desires, thereby evincing the complete maturation of the ovaries. The feel of the uterus, if the woman be not over-fat, its lightness and small size, may help the diagnosis, particularly if there have been absence of all appearance of menstruation in previous years. But in others, where, although insufficient in quantity, a sanguineous discharge has been occasionally observed, and especially if there be much *embonpoint*, the diagnosis is oftentimes very difficult. In the first variety, if the catamenia appear regularly, I have found the best plan is to wait for the catamenial period; and on the second or third day, when this has been firmly established, the catgut bougie has been easily introduced, and gradual dilatation rendered possible, until at length the hysterotome could be passed in, and the incision to enlarge the passage made. But in the second variety, where the catamenia have been very irregular or absent, I have adopted a different plan. Formerly, I used to employ a piece of pointed deal, surrounded by cotton wool, which was pushed in as far as it could go, and kept *in situ* by a plug of cotton from behind. In this way, I have been gratified to find that it seemed to penetrate further every day, till, in about four or five

days, I could get a small bougie into the uterine cavity. The treatment thenceforward was very simple, and exactly resembled that in the case last mentioned. In one case, where the uterus was large, and in which menstruation had formerly existed, and a child had been born, this secretion was suspended, and I could not get the smallest bougie to penetrate further than up to where the internal os should be. Here I daily introduced the wooden plug; but, after its removal each day, I made, by a small bistoury, a puncture about a line in length, in the direction of the uterine cavity. In the course of about a week, the uterine cavity was entered; and, by the subsequent dilatation and the use of the metrotome, my patient made a good recovery. I pursue the same plan now, only I use dried sea-weed as my plug, in lieu of the piece of deal. This acts also as a sponge-tent.

Short, however, of actual stricture, or even much narrowing of the canal, there are conditions of the passage which, whether due to tumefaction of the lining membrane, to the presence of many rugæ, or to an irritable condition of the membrane not very different from that of irritable stricture of the urethra, often induce dysmenorrhœa, and seem to keep up uterine congestion and sterility. In many of these cases, the hysterotome, carefully employed, brings about a radical cure. I do not deny that some of these might get well by local depletion, such as leeches and purgatives, etc.; but a relapse in cases so treated is more common. The use of the hysterotome is preferable in these examples, especially as the cut made may be much more limited, amounting to little more than internal scarification.

2. It is, however, in *chronic endometritis*, which persists for years, and which torments not only the patient, but proves by its constant recurrence very disheartening to the accoucheur, that the hysterotome may often be very advantageously employed. In my lectures delivered at the Samaritan Free Hospital, on Endometritis (p. 47), I spoke of two varieties of endometritis, which I ventured to designate as the *senile* form and the *intermittent*. In the first, called *senile* because commonly found among old women, the obstruction is found chiefly at the lower part of the cervical canal; and the accumulation of leucorrhœal discharges occurs above, giving rise to much uneasiness, pain, bearing-down, backache, etc., until the accumulation forces open the os, and the contained matters are expelled, with full relief to all the symptoms. The *intermittent*, where the obstruction is chiefly due to stricture or occlusion of the internal os, and where, in addition to the previous symptoms, those of *pseudo-pregnancy* are also developed. I do not stop here to dwell upon these forms of disease. Suffice it to say, however, that in these cure can only result by laying the passage freely open, which is most effectually done by the instrument in question. Supposing, however, that the quantity of fluid retained *in utero* is large, as, for instance, in cases of retained menses from stricture of either os, must the treatment pursued be identical? My reply is, certainly not. We must bear in mind that the uterus moves up and down with the movements of respiration. If the speculum be introduced, this may be seen. If the patient take a deep inspiration, the uterus is pushed downwards; it, on the contrary, rises with expiration. I have measured the extent of this movement, which is considerable, by the *kinometer*, over and over again; and the fact is well known to most accoucheurs. If we have now a large uterine cavity, containing an amount of fluid, and lay open the external os, air will rush into the cavity with force during expiration. We may thus induce the formation of putrid contents in the uterus—a

condition with which I have met. It is for precisely the same reason that we should not open an *ovarian cyst per vaginam*: air will penetrate; the contents become purulent and fetid; and death very often, almost invariably, will result. It is for this same reason that, in cases of retained menses which are allowed to come away *per vaginam*, death is not unusual. An opening *per rectum* has not the same disadvantage. The sphincter here prevents this suction of air upwards during expiration. In cases of cellular abscess which open or are opened *per vaginam*, the same objection does not apply. Here, as you may convince yourselves by the kinometer, and as the uterus is fixed, the movements of respiration have no effect, and hence the danger is less. If, therefore, the opening be made by the hysterotome, it should be free; and it is a *sine quâ non* to wash out the uterine cavity, and frequently so, with warm water, to prevent fœtid accumulations. Even then much trouble is entailed. It appears to me, therefore, that if the quantity of fluid contained be great, it is wiser to remove it first *per rectum*, before we lay open the uterine os. The neglect of this simple precaution may prove the cause of a patient's death, as its observance may ensure the patient's safety.

3. There are two diseases, *retroversion* and *anteversion*, to which women are very liable, and which not unfrequently give rise to much inconvenience. Occasionally, indeed, the woman becomes a complete invalid. In the former especially, I have found the hysterotome in many cases curative, not only in removing the retroversion, but the sterility which is not unusually present in this affection also. I have elsewhere explained (*Lectures on Endometritis*) what I believe to be the etiology of this affection; namely, congestion of the body of the uterus, superadded to an effort to lift up a weight, or a sudden fall. The cure in these affections is through the *loss of blood*, which relieves the congestion, and enables the previously top-heavy organ to recover itself. What I have here said will explain the advantage to be derived by its employment in cases of simple uterine congestion with prolonged cervix or ulceration—conditions usually relieved by leeches, but which can be far more readily and quickly cured by the hysterotome. The blood lost is in these cases more rapidly lost, and flows more copiously. The effect produced is more permanent therefore; and, if followed by those remedies which, like scalse, strychnine, and a few others, have the effect of *contracting* the uterus and its muscular parietes, the blood does not again accumulate in the vessels, which recover their full elasticity and tone where they were before passive, and a cure follows.

4. There is only one other affection to which I must incidentally refer. In most if not in all cases of *hæmorrhage due to the presence of fibrous tumours*, it has been shown that opening the os freely nearly always diminishes, mostly arrests, all hæmorrhage. I have so lately and so fully discussed this subject in my Lettsomian Lectures, which have been published in your JOURNAL, that I need say no more on the subject here.

It will thus be seen that I am an advocate for the free use of the hysterotome, and that I do not apprehend any danger from its use in experienced hands and with a proper instrument. It only remains for me to explain the *modus operandi*, and the several instruments which I would recommend.

The hysterotome first employed by Dr. Simpson is a well known instrument. It cuts only on one side, and requires to be applied twice, on the opposed uterine surfaces. In or about 1849, I brought out the instrument I now show you, manufactured by Mr. Maddox—a double instrument, which has done



good service. It is also upon the bend: so far an advantage. Its defect is, that it wants power; and, like Dr. Simpson's, it makes the cut in the neighbourhood of the internal os as broad as that at the external os. This is a mistake, and is one cause of the fatal hemorrhage which has sometimes, it is said, occurred. This hemorrhage proceeds from the circular arteries which are placed in the neighbourhood of the internal os, so well depicted in Dr. Savage's beautiful plates, and which must necessarily be wounded if the incision at this spot be here too extensive. However, as at this point it often happens that the uterus is constricted, the whole thickness of the organ may be cut through, or nearly so, and may be the cause of not only hemorrhage, but also peritonitis. It is here that my friend and late colleague Dr. Greenhalgh has made a signal improvement in the instrument, which has been still more simplified by my colleague Dr. Savage, and modified again by myself.

Look now at this instrument of Dr. Greenhalgh. You introduce it as an ordinary straight sound. As you press your index finger against this stop, and pull down at the same time the instrument, the knives start out, one on each side. However, they start out but little at first; but, as they descend, they start out more. The cut thus made is triangular. Note now in this plate the position of the circular arteries. They are entirely avoided. Here, then, lies the improvement. It is difficult by Dr. Simpson's instrument, or mine of 1849, to avoid cutting too deeply above; but by this instrument you cannot, if you would, do so. I do not say that, in the hands of a skilful practitioner like Dr. Simpson, he might not with his instrument cut triangularly, as you must with this; but, with my hands, I should be more confident to use Dr. Greenhalgh's.

One great advantage of Dr. Greenhalgh's instrument is, that it is narrow, and can be used without a speculum, there being on each side a *guard* to prevent the vagina being wounded. Its narrowness also admits of its employment in a virgin. There is no doubt that this instrument, made by Mr. Weiss, is a perfectly straight hysterotome. The objections are, its *price*; its occasional difficulty of application—at least to me, for Dr. Greenhalgh does not admit this; and its not being on a curve.\*

Let us now look at Dr. Savage's hysterotomes. I give you his own description, with which he has favoured me.

"No. 1. A straight double action hysterotome, something like Smellie's scissors. The blades, when closed, slightly pass each other, so that each cutting edge is sheltered by the back of the opposite blade. The handles are strongly bowed, to suit the hand. A spring within the bows closes the blades the moment the pressure of the hand is relaxed.

"The cutting action is regulated by a screw and moveable button at the end of the bows.

"The blades, when closed, form a stem not larger than an ordinary uterine sound.

"Dr. Savage uses it with or without the speculum. In a practised hand, a regularly conical incision is readily made, by graduated compression of the bows, as the instrument is being withdrawn. The blades fall back the moment the compression at the bows is relaxed. This also is manufactured by Mr. Weiss.

"No. 2. *Straight Hysterotome*. Two long plates of metal, prolonged into a stylet, about the size of a uterine sound. Two thin cutting blades, one behind the other, within, and, when closed, entirely protected by the hollow stylet. Each blade is pro-

longed into a shaft, curved in a direction contrary to the cutting edge. The shafts, like the blades, are entirely covered by the metal plates, and are attached below to a single handle by a moveable joint. A pin on each side, passing through both the metal plates opposite the commencement of each curve in the shafts, force each blade to project more and more, as the shafts are drawn down by the stylet-handle between the metal plates. The latter terminate in a shield. By placing the thumb against the shield, so as to retain the instrument in the uterus, the handle is easily drawn down by the remaining fingers of the same hand. The organ is thus held *in situ* by the stylet all the while, the blades, gradually divaricating, cut their way out as they descend, making a conical incision, the shape and extent of which obviously depend on the figure of the curve and proximity to each other of the pins.

"The instrument is regulated by a forked spring, moving the pins. After the curve has passed the pins, the blades fall together between the metal plates, and can be easily withdrawn without danger to the vagina. This was manufactured by Matthieu of Paris.

"No. 3 *Straight Hysterotome*, with action the same as the last; but it was found that the length of the incision in the former varied with the position of the pins. In this, there is substituted for the pins, a plate of metal, which turns on a centre; so that the width of the incision can be varied without variation as to its length. This arrangement is the invention of Mr. Foveaux, of the firm of Weiss in the Strand.

"In both the latter instruments, the blades fall back the moment the incision is completed. The metal plates are apparently scarcely wide enough to protect the vagina. Of course, this objection is at once removed by making them wider; Dr. Savage, however, says he prefers the plates as they are.

"Cases of failure after the use of hysterotomes are often effectually treated by a more deliberate operation after Sims's method. The position of the patient is on the side. A Sims's speculum, held by an attendant, draws back the perineum and back part of the vagina. The uterus is drawn forwards by a fine hook attached to the posterior lip, and a knife with a long handle and a moveable blade, which acts laterally—that is, on the flat—previously fixed at an angle suitable to the case, makes an incision, first on one side and then on the other at discretion. This instrument, No. 4, is Dr. Savage's modification of Sims's knife. It is double-edged, and, for the sake of portability, is divided into three parts. Any number of small blades, having these trunnion knobs, can be firmly fixed on the holder, which is an ordinary bivalve holder, with holes for the reception of the trunnions."

I pass on now to speak of my own. This was manufactured by Mr. Coxeter, and, as you may suppose, it is the one I prefer.

The internal mechanism is similar to that made by Matthieu for Dr. Savage, with one or two little improvements. The groove in which the pins play being not straight, but inclined outwards, so that they do not fall inwards when they have reached a certain point. The parts come off at once, without unscrewing the pins. But the principal merit, I think, is the curve. The distal end of the instrument is straight. The part which penetrates the uterus, and two-thirds of its length beyond this, consists of a semicircle. The blades, as they open and are pulled down, thus descend in the same plane, and the cut surface is, therefore, uniform. In all the curved instruments I have seen, the uterine portion may be curved, but the other portions are straight. Hence, the blades are forced out of position, and

\* Dr. Greenhalgh's first instrument was on a curve, but only in its extreme end.

make an irregular cut. The objection is the breadth of the shoulder, and the difficulty of its application in a virgin. My reply is that, in such cases, hysterotomes, if used, and if the hymen be an obstruction, should be preceded by a sponge-tent to dilate it. But besides, though the shoulder be wide, yet the finger is round, and the aperture required to admit the latter will, after all, admit the former. Again, it is more readily applied in cases of ante- or retro-version. And its cost is very much lower; at least one-third that of Dr. Greenhalgh.

But all the hysterotomes in the world will not answer, in many cases, unless measures be taken to keep the incision open. It may be laid down as a rule that once we have a canal lined by mucous membrane which has contracted, although it may be safely dilated, it will, as a rule, have a tendency to contract again. As, moreover, it was usual, occasionally, that these cases bled a good deal after the use of the hysterotome, the custom has been to plug with oiled lint the cut uterine cavity, both to restrain the hæmorrhage and keep it open. I have, as others, usually kept this plug in forty-eight hours before removal, and then substituted a metal pessary; occasionally, a sea-tangle-tent. The former are less irritating; but often fall out.

Now here it is that my friend, Dr. Greenhalgh, has invented a metal uterine pessary, to which I must give the palm. I now show this instrument, manufactured by Weiss. It is made of silver, and looks like an ordinary hollow, slightly curved, metal tube, rounded at the distal end with a shoulder at the other. In reality, it is made of two lateral halves, which separate by a spring; and it, also, has one large aperture at each side. By means of a central wire, which fits through projecting rings inside the tube, it is admitted closed. When the wire is withdrawn, it opens; thus keeping the dilated organ patent; and, as not only is the pessary open, and thereby prevented from falling out, but as the sides of it have also lateral apertures in them, the catamenial flow is not prevented, and it may be worn, and is worn, safely, by patients who are menstruating. One other advantage is this. Owing to the spring before referred to, were the circular uterine arteries cut, the apposition of the sides of this stem pessary against them would, by pressure, check all hæmorrhage. With these instruments, it must be a bad case, indeed, which will not be kept open. I may say, these silver uterine pessaries, after cutting by the hysterotome, if not too long, so as to press against the fundus, give rise to very little if any inconvenience, though kept in for months.

**TESTIMONIAL TO MR. JAMES.** Mr. James, on his retirement from the Melbourne Hospital, has been presented by the committee with an address, elegantly engrossed and illuminated on vellum, expressive of the high satisfaction with which they very properly regarded his conduct, during the long period he was connected with the hospital.

**AN ARTFUL SUICIDE.** That druggists are not always to blame for deaths which had been ascribed to their carelessness, is well shown by a case referred to in Dr. Taylor's report. It is that of a man who bought four ounces of Epsom salts of one druggist, and half a pound of oxalic acid of another. He then emptied the Epsom salts from the papers, replaced them with oxalic acid, and then poisoned himself. The substitution was afterwards proved by the circumstance that some crystals of Epsom salts were found remaining in the folds of the paper, and thus the druggist was acquitted of blame, and the fact of suicide established. (*Chemical News*.)

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### LINCOLN COUNTY HOSPITAL.

DISLOCATION OF FEMUR OF FIVE WEEKS' DURATION:  
REDUCTION.

Under the care of T. SYMPSON, Esq.

[Reported by C. HARRISON, M.D., House-Surgeon.]

H. C., aged 11, was admitted November 2nd, 1863. He stated that, five weeks previously, he was riding a horse, which galloped off and threw him; he fell on his right hip, and could not raise himself. He was afterwards seen by two surgeons, who tried to reduce the dislocation with pulleys; but, not succeeding, left him to be a cripple for life. His friends were, however, advised to send him to the hospital. On admission, the head of the femur could be distinctly felt on the dorsum ilii; and when he was in the upright position, the foot of the affected side, rested on the dorsum of the opposite foot. In the measurement, from the anterior superior spine of the ilium to the outer malleolus, the limb was two inches shorter than on the opposite side.

November 3rd. He was placed under the influence of chloroform; and the pulleys were applied in the usual manner, but unsuccessfully.

November 4th. Chloroform was again administered; the pulleys were applied; and suddenly, the extension being removed, the head of the bone slipped into its proper place.

November 11th. He was allowed to get up; and was discharged cured on the 23rd.

EMPHYEMA; PARACENTESIS THORACIS; RECOVERY.

Under the care of S. LOWE, Esq.

[Reported by C. HARRISON, M.D., House-Surgeon.]

JOHN S., aged 18, farm-labourer, was admitted October 14th, 1863. He stated he had always enjoyed good health until last May, when he took cold, and was suddenly attacked with giddiness and rigors, followed by pain in his chest, cough, and slightly bloody expectoration, with great dyspnoea. This state continued about three weeks; and then his chest began to swell on the left side. He had been under treatment at the Dispensary as an out-patient; but, the swelling on the left side of his chest having gradually increased, he was advised to apply at the hospital. On admission, the left side of the chest was much larger than the right, and altered in shape; the intercostal spaces bulged; there was dulness all over the left side, and the vesicular murmur was inaudible; there was no vocal fremitus. Respiration was puerile on the right side. The heart was displaced, and beating on the right side of the chest. He could only breathe in the upright position. He expectorated a great quantity of muco-purulent matter; had diarrhoea, loss of appetite, night sweats, and hectic.

December 19th. At 10.30 A.M., the dyspnoea having become more urgent, paracentesis thoracis was performed in the usual manner, and two pints of sero-purulent fluid were evacuated. The tube was fastened in, to remain. At noon, he had slept about an hour, and breathed better; and the cough was much easier. At 7 P.M., as the breathing was rather more



embarrassed, three-fourths of a pint of pus was evacuated; after which he breathed easier.

December 20th. He had slept during the night for several hours. Ten ounces of pus were evacuated. He was ordered a mixture of ammonia and cinchona, with beef-tea, wine, and egg-flip. Pus was evacuated on the 21st, 22nd, 23rd, 24th, 28th, and 30th.

Jan. 1st, 1864. He was greatly improved. His appetite was much better; the cough and breathing were greatly relieved; the expectoration diminished. He slept well. Air could be heard to enter the lung.

Jan. 6th. The tube was removed, as no pus flowed through it.

Jan. 13th. There having been considerable discharge from the wound, the tube was reintroduced, and about twelve ounces of pus were discharged.

On several other occasions, pus was evacuated through the tubes; a quantity also escaped by the side of the tube. He gradually improved; the discharge ceased; the wound made for the tube healed; the heart returned to its normal position; air freely entered the lung; the left side of the chest became resonant on percussion; the cough and expectoration gradually ceased; and he expressed himself as well as ever he was in his life, and was discharged cured April 4th, 1864.

In this case, fluid was evacuated through the tube on fifteen separate occasions, to the amount of 230 ounces in all.

## BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE SURGICAL TREATMENT OF GLAUCOMA AND GLAUCOMOID TENSION WITHOUT IRIDECTOMY.

Under the care of J. VOSE SOLOMON, F.R.C.S.

[Continued from page 328.]

CASE VI. *Traumatic Cataract; Choroiditis and Great Tension Unrelieved by the Extraction of the Cataract; Intracocular Myotomy, followed by Cure.* Edward A., aged 40, was admitted an out-patient in June 1861, with traumatic cataract of the left eye, from a blow received four weeks before. The soft lens matter was removed by Gibson's operation (the linear extraction of Von Gräfe), and the pupil maintained well dilated by atropine. Nevertheless, the choroiditis and great tension which existed on his admission continued. On June 11th, the tension was very great, and the vitreous humour was turbid. A convex glass rendered the vision worse. Intracocular myotomy was performed to-day, and fluid discharged from the eye. In ten days (June 21st), the tension was normal. With a two-and-a-half-inch glass, the patient reads a few words of great primer (Jäger's 12). On August 2nd, three weeks after operation, the eye was normal as respects tension and choroiditis. Minion type (Jäger's No. 4) could be read with ease. No relapse occurred.

CASE VII. *Subacute Glaucoma Supervening on the Depression of the Nucleus of a Cataractous Lens; Intracocular Myotomy, followed by Relief to Pain and Tension; Cure.* Mrs. T. was operated upon by solution for cataract in the left eye, and the small hard nucleus was depressed, in August 1859. Her health was, and had been, very feeble.

On May 4th, 1860, the globe was hard; the choroid veins were enlarged; and vessels extended over the margin of the cornea, which membrane presented scattered opacities. The vitreous humour was turbid; yet, in the absence of the neuralgic pains, from which she suffered severely, the vision was reported to be good. Intracocular myotomy was performed to-day. The muscle, or a false membrane, behind the iris, cut like ligament. A full discharge of straw-coloured

fluid followed the incision. In four days (May 8th), the eye was easier than it had been for the last six weeks. In consequence of the illness of her husband, the patient failed to attend again till August 28th, 1860. On that day, the enlargement of the ciliary vessels was nearly gone; in place of a ring of broad dilated vessels, a few of small calibre only remained. The tension had given place to elasticity. With a two-and-a-half-inch double convex lens, she read pica type. The neuralgic pains have been less severe and frequent ever since the operation; they were relieved by the use of atropine drops. On November 7th, the eye was normal, and possessed clear vision for small type, when aided by a cataract-glass.

This case is not altogether conclusive, as very severe irritation, occurring after depression, sometimes completely subsides on the absorption of the lens, and excellent vision is obtained. But I have never seen such a result where the cornea had become opaque and vascular, as in this patient.

In two years afterwards, I extracted, through a full section of the cornea, the lens of the right eye. She left the hospital in a fortnight, with an eye as perfect as is possible after such a surgical operation.

CASE VIII. *Myopia; Subacute Glaucoma; Intracocular Myotomy, followed by Improvement; Relapse at the end of two years.* A cane-splitter, aged 38, who had been near-sighted all his life, was admitted June 1862. The right eye had always been very imperfect; and since an accident which occurred to it about eighteen months before, the vision had been gradually lost. The left, which had been growing more near-sighted, was rendered dim and still more myopic by the accident. When he moved his eyes quickly, flashes were seen. In about six months from the occurrence of the injury, he ceased to be able to read; and experienced so great difficulty in getting about in the dusk of evening, that sometimes he inadvertently ran up against persons in the street.

On his admission, a thin, diffused opacity occupied the middle third or fourth of the cornea. It appeared to be of old date. The eyeballs were of stony hardness; the pupils were dilated; intercurrent obscurations and iridisation were experienced. The field of vision was much contracted. He suffered from constant frontal headache, and saw objects like stars during the day. He could see to cut his nails at about five inches; but not his dinner. Roman type (Jäger's No. 20) could not be read. Most of these symptoms were observed by the patient to occur about six weeks after the injury to the right eye.

On June 7th, 1862, intracocular myotomy was performed on both eyes.

June 21st. For several days he had been able to read No. 20 at sixteen inches with clearness, and could cut his finger-nails at seventeen inches.

July 1st. The optic discs were gray and slightly cupped. The vessels on the right were much curved, on the left very attenuated. A narrow staphyloma posticum surmounted the upper circle of each disc. The tension of the left globe was much diminished. He could now see finger-nails at twenty-four inches, instead of five only. The frontal headache, flashes, etc., subsided immediately after the operation.

July 29th. Features were distinct at two yards. With a concave eighteen-inch lens, vision was much improved.

The necessities of the poor man's family obliged his return to work almost immediately after these notes were taken. At the end of two years (I had occasionally seen him in the intervals, and found the reduced tension maintained), he returned to me with hardness of the eyeball and impaired vision.

REMARKS. The supervention of glaucoma, or even exalted eye-tension, upon the myopic condition, is a

most serious complication, and should be at once met by a surgical operation that is competent to remove the intraocular pressure. For the relief of this state in some, I have performed iridectomy; in others, "division of the ciliary muscle", as it has been called. The results have not been very satisfactory, although no accident marred the operations. With one exception, the disease was far advanced. Among the illustrations of the treatment of glaucoma by iridectomy, instances will be related in which the relief following the operation was not maintained. Indeed, it seems unreasonable for surgeons to have anticipated that it should be otherwise, when we consider the great tendency to atrophy of the tissues which marks the progress of the disease under consideration, and, moreover, that atrophy of the optic nerve-fibres will occasionally precede the occurrence of eye-tension. If my theory be correct, that the operation beneficially affects the nutrition of the eye through the ciliary ganglion, the early application of intraocular myotomy or iridectomy in certain carefully selected cases of atrophy of the optic nerve, would be sound practice.

CASE IX. *Chronic Glaucoma; Intraocular Myotomy; Cure.* Mrs. B., aged 40, was admitted March 31st, 1860, has had symptoms of glaucoma in the right eye for nearly four years, and in the left for fifteen months. The right eye presented chronic glaucoma, opacity of the lens, and stony hardness of the globe. There was complete amaurosis. The left eye was of stony hardness; tension, T 3; the cornea was of normal curvature; its sensibility below par; the sclerotic was white, like porcelain; the ciliary vessels were enlarged, tortuous, and pink; the pupil was dilated and motionless; the iris was bright and convex, so that the anterior chamber was shallow. The humours were pellucid. She read, with convex glasses, small-pica (No. 8 Jäger); but it was not clear at any time.

Intraocular myotomy was performed, April 10th, on the right eye; on April 14th, on the left. Both eyes lost their hardness, and the vision of the left became clear and steady. She wrote on June 17th, "the mist through which I used to see objects has vanished away." When last heard of (Nov. 29th, 1860), the improvement was retained.

CASE X. *Anaesthesia (T 3); Excavation of the Optic Disc; Intraocular Myotomy; Temporary Restoration of Vision.* J. O., aged 70, was admitted July 23rd, 1861. He was exceedingly deaf, and was sent to me by my friend Dr. Walker. Both eyes were of stony hardness. The left had been blind two years; the right about six months. His face was livid, and the integuments of the nose were highly hypertrophied. He denied having been other than a sober man. In the right eye, there was atrophy of the optic nerve. The retinal arteries were very minute; the veins, which were very irregular, indicated cupping by being interrupted at the lower rim of the disc. Intraocular myotomy was performed as a *dernier ressort*. He was ordered to have a blister behind the ear. In seven days (July 30th) tension was diminished; the patient recognised shadows of fingers and the window-frame. In fourteen days after the operation, he counted fingers, and made out a word of No. 18 (Jäger's). The tension was too great, but not excessive.

September 9th. He read Roman type (Jäger's 20). Features were clear to him at two feet distance.

October 14th. There was a relapse. He could not read No. 20, although the tension was normal. The optic nerve exhibited advanced atrophy; the vitreous humour was more clear than heretofore. Spectacles did not relieve him.

CASE XI. *Chronic Glaucoma; Objective Symptoms and Pain removed by Intraocular Myotomy.* L. H., aged 65, admitted May 15th, 1860. She had been stone-blind

and suffering great pain for eight months. The eyes were hard as stones; the cornea rough and vascular; the conjunctivæ injected; the pupils widely dilated; the lenses opaque and green; the irides were of a dull lead hue.

On May 15th, intraocular myotomy was performed on both eyes, for the relief of pain. On the 25th, it was repeated on the right eye.

July 30th. Tension was moderate; there was no pain; the cornea were clear. The patient's vision was as on her admission.

[To be continued.]

## Transactions of Branches.

### MIDLAND BRANCH.

CASE OF ABSCESS FORMING A FISTULOUS OPENING BETWEEN THE BOWEL AND THE BLADDER.

By HENRY GOODE, M.B., etc., formerly Physician to the General Infirmary, Derby.

[Read October 15th, 1863.]

THE injury I am about to detail occurred to a man aged 43 years, robust and muscular, of active bodily habits, sound and healthy in all his organs, well able to undergo all the fatigue incidental to the amusements of a keen sportsman. At the beginning of September 1862, he was in robust health; but began, shortly after this, to experience a pain and weight in the front part of the abdomen, about halfway between the umbilicus and the pubes, on the left side of the linea alba, with slight tenderness on pressure; and he complained of a difficulty in doing acts such as the clambering over a stile, and in drawing himself erect again. Then came a slight lassitude and failure of appetite. But still, though he felt unequal to continue his sporting expeditions, the symptoms were so far from being urgent, that he did not for a time think it necessary to apply for medical assistance.

I saw him accidentally, for the first time, on October 26th; at which period he complained of pain in the small intestines, flatulence, and nausea, and distress at the neck of the bladder in passing water, the urine being high coloured and scanty. An examination of the urine showed nothing unnatural in this secretion, except that boiling threw down a deposit of phosphates, soluble in dilute nitric acid—a very usual symptom in irritation of the intestines. On November 7th, the urine was first observed to contain a little mucus; and a few white flakes floated in it, resembling minute portions of paper: these, on being viewed through the microscope, proved to consist of granular corpuscles, and, as events subsequently showed, were the first indication of inflammation in a part of the mucous membrane. About the middle of this month, he began to find tenderness in the region of the cæcum, with occasional attacks of spasm; and the dull pain on the left of the linea alba continued unabated. For the next month there was little change, except a gradual increase in the mucus and white flakes of the urine. Blisters and other remedies were resorted to, but all seemed of no avail; and, becoming impatient, the advice of my friend Mr. Fearn was sought by the man's friends, who agreed with me in considering that there was evidence of some obscure inflammatory action of the peritoneum covering the small intestines, if, indeed, there were not an abscess situated among them. On passing the hand down the left flank, a rough sensation was perceived, as if the



abdominal wall were studded with minute tubercles; and this effect we supposed to be caused by lymph effused on the peritoneal surface. At the time, these symptoms were attributed to undue exposure to wet.

On December 23rd, the urine was still free from albumen, but loaded with mucus and the floating white flakes. There was also tenderness and swelling of the right cord and testicle. Shortly after this, there began to be a passage of wind by the urethra, succeeded in a few days by a quantity of dark matter with small lumps, which was described as having exactly resembled the loose faeces passed about that time from the bowel; and, on December 30th, the urine was found to have become strongly albuminous, and to contain much pus. It became evident that a communication had taken place between the bowel and the bladder, apparently by the bursting into the bladder of an abscess communicating also with the bowel. Still there was no evidence of disturbance in the rectum or large bowel, and no urine has subsequently been detected passing by the anus; on the contrary, the faeces were usually of a solid consistence, such as belong to a state of health. The patient found that, when lying on the left side, this posture most promoted the passage of flatus and little particles from the bowel into the channel leading to the urethra.

The treatment adopted at this time was to administer sedatives to lull the irritation; and to prevent motion as much as possible, that adhesions might form, if they would, to close the opening. The flow of the pus into the bladder irritated the mucous lining of that organ and the urethra, and wore down the patient to a state of great emaciation; but the urine by degrees became more free from pus; and on Jan. 13th he felt so well, that he got up from bed, and walked down stairs several times. This movement caused an increase of the pus, and renewed the irritation of the bowel and bladder; and it was noted especially on one occasion, that he lay on his left side during the night, and the next morning passed in his urine a considerable quantity of orange-coloured pulpy matter, which proved, on examination, to be the pulp of oranges eaten during the night.

On the 20th, he experienced much pain in the neck of the bladder, and much increase of irritation in passing his water; this lasted for two days, until, on one occasion of passing his water, he discovered in the chamber-vessel a small triangular fragment of a plum-stone, with the three angles exceedingly sharp. After this, the irritation subsided to the same condition as before; and, though this continued to wear him down, his tongue and stomach, on the whole, continued good, with the exception of occasional slight bilious attacks of one or two days' duration. He noticed, about February, a singular symptom, which continued always afterwards: that whenever he drank any alcoholic liquid, of the nature of wine or brandy, he immediately felt a sharp pain shoot down to his bladder and urethra.

Towards the end of February, he was again so much better, though much emaciated, that he took a drive in a carriage; but the result of the shaking during his ride brought again an increase of the pain and disturbance, and more flatus passed by the urethra. After this, he kept himself still at home; and through March he gradually improved, inasmuch that, at the end of that month, no wind had passed by the urethra for a period of six weeks; the urine became more clear; and he began to walk gently about. At this time he was rapidly regaining flesh, even as much as five pounds weight in a single week. It was evident that at this time the fistulous

opening was closed, and with the cessation of the consequent irritation came renewed strength; but, about the middle of April, it again became open, and he again rapidly lost the ground he had recovered. The pus in the water was not constant, but seemed to accumulate in the abscess, and he discharged every few days; and his emaciation became extreme. He was sounded for stone, but none was detected.

He noticed, at various times, the passage by the urethra of articles of food from the bowel. Thus, on one occasion he perceived some chopped mint, from mint-sauce he had eaten; on another, a fragment of strawberry with the seeds, and a fragment of a rook's bone. These fragments had a faecal odour; but there was never observed any of the excretion formed peculiarly in the large intestines.

Towards September, he became well enough to go into the country; and, in the course of a month or two, recovered so much of his appetite and strength as to be able to walk with vigour, and his weight reached twelve stone; but the fistulous opening was never closed long at a time. He gradually, however, fell back again, and for the last twelve months has gone on without much variation, being not capable of much exertion. He informs me that lately, after taking some unwonted exertions, which strained him, for two or three days loose faecal matter passed by the urethra, causing much irritation in the bladder, and consequent loss of strength and appetite; and during that time nothing whatever passed by the bowel, but since then the excretions have passed by the ordinary channels. He has not, however, recovered from the effects of this last strain, suffering from pains in the region of the left kidney, and swelling of the left testicle; but no tumour can be detected, and the granular condition perceived formerly in the abdominal walls has long since disappeared.

Such is the history of this almost unique case, which seems beyond the reach of art. As to the probable cause of the fistula, it seems not unreasonable to attribute its origin to the little fragment of plum-stone passed in the early stage of it. To this cause it was always attributed by the patient, who averred he had never eaten any stone-fruit since the beginning of September, when he partook of a plum-tart, before his illness began. If this were in truth the cause, the fragment must have become fixed by one of its sharp points in a fold of the mucous lining of the intestines, and there produced a perforation, with sufficient peritoneal inflammation to effect a union between parts of the bowel and the bladder; and, finally, it must have passed into this viscus. The general freedom of the colon from disturbance, with the nature of the little particles of faecal matters detected in the urine, and the other symptoms, render it likely that the aperture in the bowel is placed in some part of the small intestines; and this supposition is further corroborated by the fact that injections by the rectum have never passed into the urethra.

An account of a case somewhat similar is recorded in the tenth volume of the *Transactions of the Association*. It is there stated that a little boy swallowed a pin, which ultimately reached the appendix vermiformis; and, causing this to become adherent to the posterior part of the bladder, passed through and lay in this organ, leading to the formation of a stone, which seems to have been the principal source of distress. But, for further particulars of that case, reference must be made to the paper itself.

In the present case, it appears that any means of closing the fistulous opening would effect a cure; but this we have no means of attaining.

Shortly after the above paper was read, the man alluded to sank under his disease. He was seized with a rigor, followed by persistent hiccups and vomiting, which yielded to no remedies, and, after continuing for several days, ultimately proved fatal, after two years of disease.

**SECTIO CADAVERIS.** On opening the abdominal cavity, the omentum appeared healthy. When this was raised, the coils of the intestines, in several parts below the level of the umbilicus, were observed to be firmly agglutinated by adhesions of old standing; but there were on the surface no traces of recent lymph. The stomach and the upper parts of the viscera appeared to be perfectly healthy; but the lower were green and discoloured, as was also the peritoneal surface of the bladder, to which the cæcum and adjacent portion of ileum adhered. The extremity of the appendix vermiformis made a nipple-like process in front. Behind the bladder, in the pelvic space, was a firm mass, about six or seven inches in diameter, which, on removal, was found to be a large abscess, with indurated walls of about an inch in thickness. This abscess was united to the bladder on its front, and above to the lower surface of the cæcum and adjacent portion of ileum; and it communicated freely with both the cæcum and ileum by several apertures in each, of sufficient size to admit the finger. At the lower part, the sac of the abscess opened into the bladder by one small aperture sufficiently large to admit the free passage of a probe, and situated between the orifices of the ureters; and thus the abscess formed a canal of communication between the bowel and the bladder. The mucous lining of the bladder was healthy. The wall of the abscess was firmly united to the rectum where it lay against it, but did not communicate with it. It appeared somewhat singular that, notwithstanding the free communications from the bowel, the sac of the abscess was empty and free from fecal matters, which can only be accounted for by supposing that the pressure of the viscera maintained the two walls of the abscess in close apposition during life. In removing the diseased mass, a small collection of recent pus at one side disclosed the existence of a small recent abscess; and this was probably connected with the rigor and the gangrenous condition and the vomiting which ultimately destroyed the patient.

ON THE ADVANTAGES OF RETAINING THE STAFF IN THE BLADDER UNTIL AFTER THE EXTRACTION OF THE STONE IN LITHOTOMY.

By EDWIN MORRIS, M.D., F.R.C.S., Surgeon to the Spalding Union Infirmary, etc.

[Read at Lincoln, Dec. 12, 1862.]

UNFORESEEN difficulties frequently arise during the operation of lithotomy, which considerably embarrass even the most experienced surgeon. Any suggestions, therefore, that may be thrown out with a view of lessening them, cannot be otherwise than welcome to the practical surgeon.

During my first operation for stone, I did not, as is usual, remove the staff until after I had extracted it. I was so struck with the simplicity of this proceeding, and the facility with which it enabled me, when I required, to pass my finger or forceps into the cavity of the bladder, that I have ever since adopted it when operating for stone. I witnessed an operation for stone on the opening day of St. Thomas's Hospital, at the Surrey Gardens, by Mr. Clark, when I noticed that he also retained the staff; and on that occasion it certainly did him good service. The operation was well and quickly done; but, from some cause or other which I did not hear explained, the

extraction of the stone (which was by no means large) was a difficult and most tedious affair.

When we reflect for a moment upon the structure and position of the parts involved in this operation, and the various abnormal conditions in which they are frequently found, we shall no longer be surprised at the complications and difficulties which often occur to baffle the efforts of the operator, and to shake the confidence of the young surgeon. To be "forewarned is to be forearmed". A knowledge of this fact, together with a practical proof of the utility of the retention of the staff during the operation of lithotomy, is the only excuse I shall offer for having brought this subject before the notice of the members of this Association; and, had this plan invariably been adopted, we should not have been pained with reading accounts of trials in a court of justice relative to lithotomy, or with the details of a prolonged and cruel operation.

We will suppose, if you please, that the operation has been so far conducted that the knife of the operator has entered the bladder; urine flows copiously. "The staff is now to be removed; and a pair of forceps, adapted to the age and size of the patient, are then to be introduced." These are the written directions of one of our leading surgeons of the present day, attached to one of the largest hospitals in London. To this proceeding (with the greatest deference towards that gentleman) I am diametrically opposed. To withdraw the staff at this part of the operation is, in my humble opinion, to lose the key which would enable us to overcome nearly all the difficulties which may arise during the future proceedings of the operation. To enable us to judge of the utility of this proceeding, I must describe a few imaginary cases, where certain difficulties have arisen (and which have, in fact, frequently, too frequently, occurred), wherein the retention of the staff would have been of the greatest service.

The first case we will suppose is that of a child under eight years of age, where the operation has been so far conducted, and, in accordance with the usual custom, the staff has been withdrawn. It is found, however, that the opening into the bladder is too small, owing, probably to timidity on the part of the operator in using the knife at this particular spot. It is all very well to say, "Enlarge the opening by forcibly passing the finger through it," or rather through a mere puncture that has been made. All practical surgeons will tell you that this is not so easily done. The tissues are remarkably resisting, and not so readily torn—if they be, assuredly the force used to effect this will be productive of much mischief afterwards, which the surgeon will sincerely regret. The fact remains: the opening is too small, and must be enlarged. For this purpose, the operator passes his finger within the wound; and, after some exploring, he may or may not find the small opening. How useful he would find the staff at the moment; and if, by any chance, it had been retained, how thankful he would be! If he now attempt to reintroduce the staff, in all probability he will be foiled; the end of the instrument will not enter the bladder so easily, but become entangled at the small aperture already made; and it is just as likely that he would be guided in any direction than into the bladder. If he fail in reintroducing the staff, and depend upon his forefinger as a guide to the bladder, he is in great danger of forcing his way between the bladder and rectum, or of seriously wounding the latter. The above is not a fancy-drawn picture, but has actually occurred—to experienced surgeons too.

Another difficulty may also arise from the fact that the opening all the way has been made so small that in passing the finger, so as to admit of enlarging it,



you plough before your finger the surrounding tissues, which completely baffle you in your attempt to find the opening into the bladder. You then pass your knife along the finger, in the hope of reaching the bladder again; but, alas! the risk you run of inflicting irreparable if not fatal injury upon your patient is enormous. Now, in all these cases, had the staff been retained, the advantages gained by the operator would have been incalculable! And why not? It is not in the way, and does not interfere with the future movements of the operator.

What I recommend is simply this. After the bladder is opened, instead, as is customary, of removing the staff before the extraction of the stone, let it remain in the hands of an assistant, who hooks it up firmly underneath the symphysis pubis, and holds it there, out of the way of the surgeon. Should it be again required, it is ready at a moment's notice. If the assistant merely depress the staff, and bring its convex portion down on the perineum, the operator with his finger readily finds it. He has thus at command an iron rod into the bladder. If it be necessary, he can now with safety enlarge the opening with great facility. I have long since seen the necessity of such a proceeding, and have really wondered that it has not before been insisted upon by surgical writers and teachers. I have not, however, hitherto seen it alluded to, or noticed in any way, with the exception of the instance at St. Thomas's Hospital which I have before mentioned. I feel strongly upon the subject, and hope to hear of its universal adoption; and trust that those whom now I have the honour of addressing will on the first opportunity test the practicability as well as the utility of the proceeding. I could advance many reasons why it should be adopted; but I am at a loss to advance one single argument against, or objection to, the practice. Any observations I may have to make relative to the practice of retaining the staff until after the completion of the operation for stone must necessarily be brief; there is so little actually involved in it that requires explanation, further than that the staff should be retained. The more simple the way, therefore, in which the subject is introduced to your notice, the better. Had I, on the other hand, proposed a new mode of operating, it would have been necessary to have written an elaborate treatise about it, with a full detailed description of the structures involved in the operation, together with proof of the reasons why a new method should be adopted in preference to one which had been universally practised for so many years. The error which I wish to see corrected is one of omission, not commission, and does not involve the operative procedure usually followed. I make this apology for the shortness of the paper, and trust that you will not think the subject less worthy of your notice on that account. As far as I am concerned, my object is attained—the opportunity of bringing before you this really important matter; and I hope that it will elicit from some practical surgeon present his views relative to the practice, and at the same time draw the attention of the surgical profession to a subject well worthy their serious and attentive consideration.

**CULTIVATION OF THE CINCHONA IN AUSTRALIA.** At the last monthly conversation of the Victorian Acclimatisation Society, Dr. Mueller, in the course of a discussion upon Mr. Duffield's paper entitled "Some account of the quinine yielding Cinchona," thought it probable that the cinchona might be naturalised in the eastern parts of Gipps Land, in some portions of New South Wales, in Queensland, and in the northern part of New Zealand. (*Australian Med. Journal.*)

## British Medical Journal.

SATURDAY, OCTOBER 29TH, 1864.

### DEATH OF

ARCHIBALD ROBERTSON, M.D., F.R.S.,

VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

ONE of the oldest of our Vice-Presidents has lately been removed by death. Dr. Archibald Robertson, a man known as a learned and accomplished physician, and at the same time a most genial and kind-hearted gentleman, died at his residence in Clifton on the 19th instant, at the age of 74. In early life, Dr. Robertson served for a short period in the Royal Navy; but afterwards settled in Northampton, where for many years he had a large and successful practice. He was highly respected by all; and his widely extending reputation rendered his practice very laborious in the later years of his active life. He retired from practice about ten years ago; since which time he has resided at Clifton. Notwithstanding his retirement, he maintained his feeling of interest in his profession, and was a warm friend and firm supporter of the British Medical Association, of which he was President at the meeting in Northampton about twenty years ago. He leaves one son—a clergyman of the Church of England.

### THE MEDICAL PROVIDENT FUND.

THE first meeting of the Directors of the Medical Provident Fund, to which we briefly alluded last week, and of which we give a detailed report in the present number, must, we feel, prove most satisfactory not only to the members of the Association, but to the profession at large. The number of Directors present, many of them coming a day's journey, and all coming from the duties of active practice, indicates how earnestly the cause of the Medical Provident Fund is espoused, and how complete is the machinery of the Association, when it is once put in motion, for carrying out this or any other useful work. The meeting shows, in truth, that as yet we know little or nothing of the real strength of our body. Its energies have been, as it were, laid aside, only to prove themselves the more powerful when exercised.

The character of the Directorate deserves special attention. As the Chairman remarked at the meeting, the Branches of the Association, from their local knowledge, have facilities for selecting the most likely men for fulfilling the duties pertaining to the office of Director; and we must state what we think few will deny, that on this occasion the Committee

of Council and the Branches have exercised a judgment which is most satisfactory. Without dwelling further on the qualifications of the members of the new Board, we prefer to turn to their work as the test of their capacity for the task they have undertaken. We think we may safely congratulate the Association on the first specimen of work done; while we may remove, by referring to it, all the scruples and objections which have been so enviously made in reference to the spirit in which the Fund was originated, and by which, it was presumed, it would be carried on.

On the question of the limitation of age, which was brought forward, as promised at the Cambridge meeting, the Directors did all that they could, under such limitation should not be enforced. At the same time, they could not shut their eyes to the fact that, on the present system of calculation, the extension beyond the age of sixty is, in an actuarial sense, unsafe. They therefore, allowing their judgments to balance their sympathies, have stated that it is their wish to put no obstacles in the way of any one who may desire to take advantage of the Fund; but that, as they have to deal with facts, they must meet them as they are presented. They therefore have referred the subject to their Executive Committee, commissioning that body to inquire whether, on some new basis of calculation and arrangement, the object asked for may be obtained. Those who know best the difficulties of dealing with the refined points of calculation on the value of health and life, will appreciate most readily the prudence of the course that has been pursued.

By an unanimous vote, the Board of Directors have determined to throw open the benefits of the Provident Fund to the whole profession. We expected from the first that they would do so. The act is but the echo of the prevailing tone of the meeting at Cambridge; nay, we believe, it is but the echo of a meeting held so long ago, that there are probably not twenty members who remember it. It was an act, for which there was no necessity for any one individual to assume that pressure was needed. It comes spontaneously from the heart of the Association. It carries with it useful administrative work, which the Association can do, and will do. It is not to be supposed that those who saw difficulties in the way were either insensible to the wants of the profession, or misguided in their judgments. In a strict and business point of view, these gentlemen, in matters of law and of honour, were sound—some thought too sound—in their views. They saw that the Association could carry out for its own members a safe and sure policy on the broadest principles, not only of mutual support, but of representation in its fullest sense. The Association will do this in a way that would admit of no misunderstanding—in such a

way, that no man could say to another, "You aim to act for me without consulting me, and to usurp rights which I cannot yield." This was a strong argument; its bases being unity of purpose and of action—bases which constitute the essentials of mutual support and aid. There also was the legal argument, equally strong and definable; but there was still another—namely, that it was not just to ask men to enter as units of a general scheme, even for their own benefit, and not at the same time allow them to take part in the management of that scheme. Yet, on the assumption that the Association must take the initiative and be the organising body, there remained no other course than that which was adopted, in which it could proceed. The difficulties, always reasonably put forth, have been removed by the experiment of cutting the Gordian knot, and trusting to time and circumstance for the removal of any dangers that may arise. We have said that this was the only course that could have been pursued; and we accept it the more readily, because we know that it will be carried out by men who will not lose sight of its dangers, and are ready and liberal enough to meet every emergency. So far as the mere welfare of the Association is concerned, nothing but good can, we think, follow the measure that has been taken. It cannot be expected that any member will leave the Association because it seeks to do good beyond its own limits; and it may be expected that many subscribers to the Fund, by being brought into contact with the Association, and seeing the advantages of belonging to it, will join it also. We rather hope, in truth, that the addition of members to the Association through the Fund will be so in accord with the progress of the provident scheme, that no special legislation will be necessary for subscribers outside our body.

The Provident Fund now fairly afloat, its rules in course of formation, and its officers fully appointed, nothing more is required than the individual support of our members to render it one of the most substantial and extended institutions of the day. There need now be no medical man who, in sickness, may not claim as a right, when ill, a sum at the rate of £100 a year—a sum on which many a country curate has to pass for rich during health—a sum which, if not great, is adequate to meet pressing anxieties, and which, in course of time, it may be found possible to increase largely on payment of an increased premium.

One word more, in relation to the Guarantee Fund. This Fund, raised up to the present time by the sole exertions of one of our members, amounts to nearly £400. Why, by a moderate effort on the part of several individuals, should not these hundreds be turned into thousands, and the provident design rest on a monetary basis that shall place it at once beyond all danger? This question is now no longer associational, but in its widest sense professional; and



amongst the wealthy and moderately wealthy we cannot but believe that there are some hundreds who, if appealed to, would lend their willing aid to promote the great object to which we have directed attention. We would urge the Directors to make this effort a part of the business of their office. We would urge the Secretaries of Branches to take up the same action. And to every associate, even though he should be an intending benefited subscriber, we would suggest that a contribution from himself and friends to the Guarantee Fund will be the readiest means of ensuring the success of an institution of which the Association will always have occasion to be proud, and the profession to be thankful.

### A PUZZLING CASE.

A RATHER remarkable case is now undergoing investigation before a coroner's jury. A gas-inspector was picked up in the Green Park, on Friday, the 30th ultimo, in a state of insensibility, taken to St. George's Hospital, and pronounced by Mr. Jones and Mr. Freeman, resident medical officer and house-surgeon, to be drunk. After lying there for a couple of hours, he recovered somewhat, and was delivered over to the police, who, not knowing his address, locked him up for the night. Next day, his wife and a friend bailed him out of custody; but finding him very ill, took him to the Westminster Hospital, where he died on Wednesday, the 3rd instant. He was covered with bruises on admission; and a *post mortem* examination revealed, as the cause of death, a fracture of the skull, with laceration of the transverse sinus and consequent hæmorrhage into the cranial cavity.

Here follows a brief summary of the evidence given before the jury on two occasions. Anything more contradictory could not well be imagined. The deceased was habitually a temperate man, and, according to one witness who saw him shortly before he was found in the park, sober on that afternoon, but suffering from the effects of inhalation of gas. A police-inspector, however, states that this witness had previously said he was drunk. Another witness saw him fall heavily twice—first forwards, then backward; after which he lay in an insensible condition. He further noticed an extensive bruise on his forehead. Taken straight to the hospital, his breath is said to smell of spirit. The case is pronounced to be one of simple drunkenness. No bruises are observed by the resident medical officer and house-surgeon, or by the policemen who removed him, either at that time or when they restored him to his friends the next morning. The police admit that when liberated he did not speak; but say that, in other respects, he appeared well enough. The wife and a friend who accompanied her, on the contrary, state that their attention was at once attracted by the bruises; that he

was not only speechless, but unable to walk without support. He was taken to Westminster Hospital, where numerous bruises were observed, and he became comatose and died.

The medical officers of St. George's and Westminster Hospitals agree in the conclusion that the fracture of the skull which caused death must have taken place shortly before his admission into the Westminster Hospital; we think, on insufficient grounds. Hæmorrhage from a torn lateral sinus is not necessarily forcible and profuse, as from a ruptured artery; and the blood being on the surface, and not in the substance of the nervous centres, tearing the structures will not produce local paralysis. The symptoms are not absolutely inconsistent with the fact of the injury having been inflicted in the park; and this is important. It could only have been done in the park, in the police-cell, or in the interval between the removal of the patient from this and his admission into Westminster Hospital. In the first case, there may have been a brutal outrage, or it may have been simple accident; in the second case, the worst supposition is culpable carelessness; in the last, to which the medical evidence given at the inquest would shut us up, there must have been foul murder.

Positive evidence carries more weight than negative; and it is not unnatural to suppose that a man who had seen the fall would notice a bruise, which the medical officers and the police, under the idea of drunkenness (in which they were probably right), might overlook.

### A "SECRET FRIEND" VICTIM.

A CASE of great interest to the public at large is at present under the consideration of the magistrates. The history, to the profession, is very old and well known. The charge, as it stands, is as follows.

"A man known as 'Wray', or as 'Doctor Henery', was charged with conspiring with one 'Anderson', alias 'Wilson,' to extort money from a Capt. Clarke, by publishing the nature of an illness of which the 'Doctor' had professed to cure him. The silly captain tells his own tale. I am about 28; and in August 1863, a book by Dr. Henery was sent to me, and I came to town on the 17th. I went to 52, Dorset Street, and was introduced into a small, dark sort of room. I asked the man who came in if he was Dr. Henery, and he said he was. He obliged me to give my name and address. I asked him how much I was indebted to him; and he said, 'Eleven guineas; ten guineas for the medicine, and one guinea for the fee.' After getting through that, I sent for more. I think I sent seven times. I paid him £85:11. I heard nothing more till June or July, when I received the following letter.

"'Medical Institution, 52, Dorset Street,  
Portman Square, London, July 1864.

"'No. 3 Private-room, Bugle Hotel, Newport.

"'Dear Sir,—Experience has proved that in cases similar to what you are suffering from a personal interview invariably leads to the advantage of a patient, and therefore have requested the bearer, a gentleman of great experience and skill, to see you, as

he happens to be in your neighbourhood on a professional visit.

"Yours truly,

"A. F. HENERY, M.D.

"W. ANDERSON.

"Captain Clarke, Parkhurst."

"It was put into my hands by the ostler from the Bugle Hotel. The prisoner who now stands here called upon me at my barracks on behalf of Mr. Henery. He then said that I had better draw a check for £150 to settle Dr. Henery's claim. He afterwards said he would take £100. He asked me for a sovereign for his expenses, and I ultimately gave him one. I wrote to Dr. Henery, and received this:

"Medical Institution, 52, Dorset Street, Portman Square.

"Sir,—I regret..... I do not understand your giving so much trouble in the matter. I have to inform you that my claim for £150 is for medical advice and medicine. If you will satisfy my claim without further trouble, I will give a receipt in full of all demands, or sign any paper that you may choose to draw up, so that you shall not be troubled again by your obedient servant,

"A. F. HENERY.

"September 26."

Shortly after this, the captain receives another threatening note. The doctor says that he had called at Cox's. The writer says: 'Now, supposing I were to inform you application will be made at the War-office, with explanation of case, and if we were to do so you know what the consequences would be; or supposing I were to inform you that I expect to be in your neighbourhood in Scotland next week. I am in no hurry, and will allow you time to reflect'; etc."

At this period of the investigation, the magistrate was informed that Dr. Henery, whom he had sent for, was ill in bed. "Go and fetch him," said Mr. Yardley; and fetched he eventually was. Before the justice, his name was found to be Wray. "We will call him Wray," said his solicitor; and Wray was at once identified by the captain as his "Dr. Henery."

Sergeant White then gave an amusing account of the "sick" Dr. "Henery" or "Wray".

"I found Dr. Henery in bed, and I knew him as the person trading under the name of Dr. Henery. I said, 'You must attend the court; there is a warrant for your apprehension.' He said, 'I can't; I am too ill.' I said, 'That is nonsense; I saw you out yesterday.' I pulled down the bedclothes, and found he had his drawers on. He then got out of bed.

"The case was eventually adjourned; and both defendants were required to find the same bail—that is, £500, and two responsible sureties in £250 each."

Every member of the profession will warmly echo the following words of comment on the case.

"Let the accused have the benefit of any uncertainty that may exist. If they be innocent, they are exceedingly unfortunate men, against whom appearances are very strong; if they be guilty, they are amongst the most pestilent knaves and the most dangerous scoundrels that ever merited a halter. Traders upon the weaknesses and infirmities of humanity, they are infinitely worse than any ordinary robbers; they are the highwaymen of social life—the Thugs who strangle honour."

On the second appearance of the defendants before the magistrates, the case was adjourned on account of one of them, Anderson, being reported in a state of delirium tremens. A later account reported him dead.

In a report addressed to the Board of Governors of St. Mary's Hospital, by the Medical Committee of the Hospital, on the subject of the administration of chloroform, the Committee have recommended that, for the future, the method of administration proposed by Mr. Clover be adopted in the hospital.

THE registration of medical students in London during the current session shows a diminution on former years. Men entering the profession possess, we gladly note, far higher qualifications than they did formerly. This year several of the new students are graduates of Oxford, Cambridge, and Dublin. The Church, the Bar, the Army, and even the Navy, also have their representatives in the list of students.

WE are glad to hear that the entry of students at the Royal Manchester School of Medicine for the session 1864-65 is unusually large. The average age of the students is 21 years; showing the influence of the late regulations of the Medical Council as to preliminary studies and examinations.

THE instruction of the deaf and dumb in Paris appears to have made great progress.

"In 1853," says M. Bouvier, "the Academy of Medicine, consulted as to the mode of instruction which should be employed for the deaf and dumb, replied, 'that experience had not decided whether education by mimicry or by speech was the best.' During the last eleven years, however, much light has been thrown on the question. Dr. Blanchet, during eighteen or twenty years, has followed a system which was the dream of Itard, and which tends, in the future, to transform the deaf and dumb into deaf only, removing the mutism which accompanies the deafness. For this purpose, all that is necessary is to bring up and educate the deaf and dumb in constant intercourse with persons who speak. This plan is now actually in practice in the Department of the Seine. There is not at the present time a single deaf and dumb child of poor parents who cannot receive in the communal schools of Paris the primary instruction which other children receive, and acquire at the same time a certain degree of the faculty of articulate speech. At Montpellier, Lyons, and Strasbourg, similar attempts have also been successfully made. As a guide to teachers, the works of MM. Blanchet and Valade-Gabel have received the sanction of a ministerial commission."

M. Bouvier asked of the Academy a Commission to examine the above facts. The deaf and dumb-children, it appears, thus educated, speak, but remain deaf. They gather the words of the person with whom they converse from the movements of his lips, and thus, in truth, hear with their eyes.



# Thirty-ninth Annual Meeting

OF THE

## ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIENSEN.

[Continued from page 477.]

On the evening of Monday, the 19th of September, there was a grand ball in the Hall of Zinsser's Garden. The old or permanent hall alone was used for the Terpsichorean exercises; the new building was devoted to the purposes of cooling and refreshing, and the conversations of the older and less excitable participants. The assembly was brilliant, but a little too much crowded; so that, towards ten o'clock, an exodus of redundant old gentlemen, amongst them myself, took place, and a rush was made for the long tables in the Unicorn. There the scientific discussions of the morning were continued, with the assistance of a congenial cigar, until, about an hour after midnight, they reached their legitimate end.

On Tuesday, the 20th, at eight o'clock, the meetings of the several Sections were continued. In Anatomy and Physiology, Professor Schaaflhausen of Bonn gave a lecture on Spontaneous Generation. He is a staunch adherent of Darwin, and generalises from this point of standing regardless of the consequences. To him, spontaneous generation is the only wanting link in the chain of facts which prove the unity and unchangeability of Nature. He has watched organic decomposing substances, and found that they give rise to the lowest imaginable and the smallest visible germs. These germs transform into fungi on the one, and monads on the other hand. All larger infusoria, he maintains, are only further stages of development of these monads. Indeed, all observations of the earliest stages of organic life argue, according to the speaker, in favour of the existence of spontaneous generation, and not against it. The panspermic theory of Pasteur is to him an unproven hypothesis. He next discusses the beginning of life on the globe, and says that the first formation must have been a being capable of living on water and minerals. And such a being is to the present day still formed spontaneously—the protococcus.

This provoked a remarkable discussion, which was opened by Vogt of Geneva, with the inquiry after the circumstances under which protococci originated. Having been informed that pure water in a hermetically sealed tube would, on standing, deposit these beings, he gained an easy victory, by remarking that they must be a reign of organic beings for themselves, as capable of living on pure water, which neither plants nor animals could. Remak of Berlin then said, in a somewhat depreciating style, that it was only necessary to mention the names of Ehrenberg, Schwann, and Helmholtz, in order to show that spontaneous generation was an untenable hypothesis. The speaker, being evidently somewhat excited, was cooled down by the laughter of the assembly. He was, moreover, replied to by Vogt, who spoke in favour of further inquiry, and against the burking of inquiry by the quotation of authorities. The panspermic theory he denied as a fallacy. The experiments of Ehrenberg he showed to be not conclusive, as late discoveries regarding the propagation of infusoria had much amended the teaching of that inquirer. Here, in England, Schaaflhausen will find much sym-

pathy in his endeavour to unravel the mystery of protogenesis. Have not Bristowe and Rainey shown, step by step, the spontaneous generation of the Trichina? And has not Professor Hughes Bennett of Edinburgh seen the fine particles fly together, "fall in" in generation order, and turn out a perfect living vibrio? Further on we shall see to what magnificent results these inquiries are gradually leading. The great sea-serpent is declared to be a product of spontaneous generation, upon the pattern of Dr. Bennett's vibrio, and to be composed of closely packed atoms of the size and shape of herrings.

The Section next had the pleasure of listening to a demonstration by the well known neurologist, Dr. Stilling of Cassel, of a "small brain", as the Germans term the cerebellum, which showed a part not hitherto known in anatomical science. Dr. Stilling also exhibited some magnificent folio plates, which are part of the illustrations for his great work on the *Nervous System*, now in course of preparation for publication. He was succeeded by Professor Henke, who gave a morphological contemplation of the knee-joint, explaining the apparent anomalies of the condyles of the femur, and likening them to the special features of the condyles of other long bones. Professor Fick of Zürich explained a new kymographion, or instrument for drawing, on paper, lines representing the waves of the pulse of arteries. He has substituted a series of levers and springs for the mercurial manometer in Ludwig's kymographion, and now obtains results which are in accordance with the mathematical theory. Dr. Nasse then gave some results of his chemical inquiries into the nature of tyrosine. He believed it to contain salicylic acid. This was doubted by Dr. Thudichum, who had never been able to produce trichloranile from tyrosine.

Physics began at nine o'clock, with a communication by Dr. Prestel of Emden, on the Periodic Fluctuations of Ozone in the Air at Emden. He subsequently also showed how the amount of water contained in any territory at any time might be estimated; and he proved, from the measurements of the height of three rivers, the correctness of his method. Professor Melde showed an apparatus for letting gas-bubbles of any size mount up in fluid columns; and several other remarkable illustrations of phenomena arising from the mixture of fluids and solids, or fluids and gases. Dr. Quincke had discovered three new lines, obtained in the spectra of higher order, by the employment of a micrometer cut on glass by means of a diamond. Professor Reusch then drew attention to hydrophan as a new medium for the diffusion of gases. It allows hydrogen to pass easily. It was not shown what comparison it bears to the artificial graphite employed by Graham. But when three such minds as those of Bunsen, Reusch, and Graham become concentrated upon diffusion, we may take the material of each as having its own merit, though the one be hydrophan, the other black lead, and the third gypsum.

In the Botanical Section, they began with inspecting mosses from Porto Rico, and rare plants from Baden. Professors Schimper and Sachs then related observations proving that the roots of plants secrete an acid, by means of which they produce corrosions on carbonates, such as marble, magnesite, and dolomite, and in a less degree on phosphatic minerals, imitating the course and size of the roots. Several other warmly combated communications of most special interest concluded the sitting.

The Section for Medicine began its second meeting with a communication by Dr. Thudichum of London, on the Migration of the Trichinae. He communicated observations and experiments upon pigs and other animals, from which he concluded that the young tri-

chine do not, as had hitherto been assumed after Leuckart, migrate through the peritoneal cavity and cellular tissue, but penetrate into the lymph and blood-vessels, and are distributed over the whole body with the blood. The symptoms of trichinosis, which had hitherto been surrounded with mystery, such as the cedema, the irritation of the skin, lymphatic abscesses, pneumonic and pleuritic conditions, he explained as caused by the direct irritation of the trichinae. He supported these views by observations which he had made upon a great number of patients during the epidemics at Stassfurt in Prussia and Dessau in Anhalt. Dr. Weber next demonstrated a new method for the topical treatment of the nose. He showed a syphon-apparatus, by means of which fluid could be made to enter one side of the nose and come out at the other. Water alone, he said, was irritating; and milk, or fluids containing salt of the specific gravity of serum, were preferable. Professor Remak spoke on neuroses of the base of the brain, which begin with partial paralysis of the muscles of the eye and face, and are combined with psychical derangement. In such a case, of which photographs were exhibited, he had applied the constant electric current; and not only had the paralysis and spasm of the face been improved, but the psyche also had been ameliorated.

In the Chemical Section, Professor Böttger of Frankfort exhibited a process for encrusting glass with crystals; and another for zincographing by means of chloride of platinum. Dr. Scheibler gave the results of his researches into the oxidation products of naphthaline. Professor Fritzsche demonstrated the formation of Gay-Lussit, by mixing a solution of chloride of calcium with an excess of carbonate of soda. Dr. Schmitt gave the results of some researches on tyrosine. He failed to produce it artificially; but found that, by dry distillation, it yielded ethyl-oxyphenylamide and carbonic acid. Dr. Werner spoke on the spectrum analysis of coloured solutions; showed that, for the production of good absorption spectra, dilute solutions and a strong white light were best; and proved every proposition by experiments upon an excellent spectroscope.

The Sections for Mathematics and Astronomy, Psychiatric, and State Medicine, also met, and discussed matters of special interest to the participants.

In the Section for Gynaecology and Midwifery, Dr. Birnbaum of Cologne described a case of labour which had been complicated by the presence in the pelvic cavity of a multilocular echinococcal tumour. It was necessary to puncture the tumour during labour, whereupon the head entered the pelvis, and was extracted by the forceps. On the fifth day, shivering fits and pain in the tumour appeared; but a great amount of decomposed pus, mixed with membranous rags and a large number of echinococcus cysts of various sizes, having been discharged through the vagina and urethra, the patient recovered. Dr. Guserow exhibited the new metrotome by Dr. Greenhalgh of London, and showed its advantage for quickly dilating the os uteri. There was a great debate on the instrument, and the various questions connected with its use. Professor Spiegelberg then spoke on the length of the cervix uteri in various stages of pregnancy; and concluded that these stages were not in any way characterised by special lengths of the cervix, and could, therefore, not be diagnosed thereby.

In the Section for Zoology was illustrated the great advance of natural science by means of the microscope. Almost every animal is now examined with the same exactness as the human frame. No wonder, then, that the retina of the cephalopodes

should come in for its share of examination and description. It was given by Professor Hensen. Pecten was shown to have two optic-nerves to its eye, each of which goes to a separate layer. Dr. Weissmann spoke on the development of the Tipulidæ and Muscidæ; Professor Troschel on the tongue of a kind of snail, *Conus*; Dr. Mzenikow on the organs of sense of the Annelides; Upper-Forester Müller on the nidification of birds.

The Section for Surgery had a lively discussion on the merits of a new mode for amputating the thigh at the knee, excogitated by Gritti; in it the thigh-bone is sawn off through the condyles, or at the epiphysal line, and the anterior flap is allowed to retain the patella, which it is intended to heal upon the sawn surface of the femur. Dr. Lücke had done this operation in four cases. The first was that of a soldier, who had received a shot into the knee at Missunde; he died in the second week of purulent discharges; the patella was not united to the femur. The second case dated from the storming of Düppel. Here the patella became firmly united with the saw-cut on the femur, and the patient had an excellent stump; the cicatrix was behind, and had not to sustain any pressure during walking on the stiff-foot. The third and fourth cases both ended fatally. Dr. Lücke communicated another case from Rotterdam, in which the patella had been perfectly united with the section of the femur. Professor Wagner of Königsberg next detailed the result of the dissection of a case of Gritti's operation, which had recovered, but died subsequently of kidney-disease. The patella was riding upon the anterior edge of the cut surface of the femur, was thickened and bent, and united to the femur by connective tissue only. Professor Bardeleben of Greifswalde preferred amputation in the lower third of the femur to Gritti's operation. Dr. Heine had collated twelve cases of Gritti's operation, made during the last campaign. Two only were successful; one was the case of Lücke already mentioned; the other, a case in the Austrian Hospital at Altona, which had been operated upon immediately after the sea-fight near Heligoland. All the others died of pyæmia. Professor Busch and Dr. Passavant, of Frankfort, described some cases of hypertrophy of the foot which had been treated by amputation.

The Section for Mineralogy discussed eagerly some new proposition as to the origin of the silicates by replacement of previously existing chalk. The argument was sustained principally by Dr. Volger of Frankfort, the anti-Darwinian, and Dr. Tschermak of Vienna. Much other matter of special interest was communicated.

In the afternoon of this day, the Congress adjourned to the neighbouring Spa Nauheim. This place had been well prepared for the reception of the distinguished guests. At the entrance, there was erected a fine triumphal arch, ornamented with the gigantic medallion-heads of Alexander von Humboldt, of Gauss, the great mathematician (whose brain was heavier than any other that was ever weighed, and is now the subject of the study and admiration of anthropologists), and of several other great men of the past, with whose names and memory the Association is intimately connected; amongst them, taking a centre place, Oken, the founder. The arch itself was so arranged, that the multitude, in approaching it, beheld the Geysir, or Sprudel, in the distance, as it were, framed by it. Having passed the arch in the procession, with music ahead, the visitors passed the Sprudel itself, and admired this remarkable phenomenon. It is a hot salt-water spring, carried upwards by violent exhalations of carbonic acid, and looks like a huge fountain, to which the vapour affords a magical lining, or background. It shows periodicity



in its action; and can be seen, at regular intervals, to fall quite low, and then to rise again to a considerable height. Its water is used for bathing, drinking, and making salt; its carbonic acid is also used for gas-baths, which irritate the skin, and make people sitting in closed boxes sweat. Thence the savants and friends dispersed in the fine gardens and grounds; collected again at the Kurhaus for dinner; after dinner, had music and coffee and gossip, which was most agreeably variegated by the presence of a large number of the gentry from the near and distant neighbourhood, and a good sprinkling of the candidates and professors from the clerical and scholastic Protestant seminaries of the neighbouring ancient, formerly Free Imperial town of Friedberg.

As darkness arrived, the grounds of the Kurgarten gradually became a blaze of light; all the walks, buildings, an ornamental temple in the centre, and even the very grass itself being illuminated by thousands of lamps. While this was going on, the town of Naheim opened the taps of its magnificent great beer-barrels; and had the satisfaction to see full justice done to the quality of their contents and the liberality with which they flowed. Refreshed, we wended our way towards the railway-station; passed the Sprudel, now glowing magically in the red light of a huge pot of stromtia-mixture; then the arch, and imagined the faces above smiling at our mirth, yet wishing to come down into the throng, where they had been many a time. Then, amongst firing of guns and cheering of great crowds, the steam-horse carried us back to Giessen.

[To be continued.]

**MORTALITY AMONG THE CHINESE.** "With very rare exceptions, says the *Ballarat Star*, "the mortality among the Victorian Chinese is caused by affections of the organs within the chest, and especially of the lungs."

**OUR BLACK TROOPS AND CONSUMPTION.** There are some thousands of black troops in the service of the Crown. In Ceylon the mortality is much lower among the native than among the white troops; but in the West Indies, where also there are both black and white, it is very decidedly otherwise. In Jamaica the mortality among the black troops was 30.25 per 1,000 of mean strength; among the white troops only 12.81. Mr. O'Flaherty, the principal medical officer in that command, remarks that the black soldier to outward view is apparently strong and muscular, but when sick he has comparatively little power of resisting or sustaining disease, and fatal cases of consumption are seldom protracted to the advanced stages commonly observed among European soldiers. It must be borne in mind that the black recruit undergoes a very trying change, on enlisting, from almost complete idleness, and a semi-savage state of existence, to a life of order, regularity, and continued exertion in learning his work during the first two years; the white corps brings no soldiers in the recruit stage. In Jamaica also the black troops have much heavier duty than the white, and have been provided with only two meals a day, at 8 a.m. and at noon, leaving them for nearly twenty hours without any regularly provided sustenance; but the medical officer had recommended the addition of an evening meal. The liability of the black troops to consumption is remarkable also in the returns for West Africa. At the Gambia the deaths from consumption and diseases of the lungs in the four years 1859-62 were as many as 17.64 per 1,000 *per annum*. The mortality from all causes in the year 1862 exceeded 28 per 1,000 at Sierra Leone, the Gold Coast, and Lagos; there are no European troops there to allow of a comparison of mortality.

## Association Intelligence.

### MEDICAL PROVIDENT FUND.

THE first meeting of the Board of Directors of the Medical Provident Fund was held at the Freemasons' Tavern, on Thursday, October 20th. Present: Dr. RICHARDSON, in the chair; Dr. Armstrong (Gravesend); Dr. J. M. Bryan (Northampton); R. B. Carter, Esq. (Stroud); Dr. Chevallier (Ipswich); John Clay, Esq. (Birmingham); Dr. Collet (Worthing); Edward Daniell, Esq. (Newport Pagnell); Dr. L. E. Desmond (Liverpool); Dr. Falconer (Bath); Dr. Fayer (Henley-in-Arden); T. Taylor Griffith, Esq. (Wrexham); Dr. Latham (Cambridge); Charles F. J. Lord, Esq. (Hampstead); Thomas Paget, Esq. (Leicester); T. Heckstall Smith, Esq. (St. Mary Cray); Dr. A. P. Stewart (London); Henry Veasey, Esq. (Woburn); Dr. E. Waters (Chester).

Letters expressing regret at inability to attend the meeting were read from Dr. Ogle (Derby); W. D. Husband, Esq. (York); Dr. Morris (Spalding); S. Wood, Esq. (Shrewsbury); Dr. Copeman (Norwich); H. D. Carden, Esq. (Worcester); and G. Southam, Esq. (Manchester).

Dr. Falconer acted as Honorary Secretary.

**Vacancies.** The following vacancies were announced as having occurred in the Board of Directors; one in the members elected by the Committee of Council; one in the Yorkshire Branch; two in the South-Western Branch; one in the West Somerset Branch; and one in the Shropshire Ethical Branch.

Mr. PAGET moved, Mr. HECKSTALL SMITH seconded, and it was resolved unanimously—

"That notice of the vacancies be given to the Secretaries of the Branches, with a request from the Board that, at the next meeting of the Branches, these vacancies be filled up, and the returns made to the Chairman."

**Guarantee Fund.** The CHAIRMAN reported that the contributions to the Guarantee Fund amounted to £344.13; of which £133.18 had been paid. The money had been placed at interest in the Union Bank. (The bank acknowledgments were placed before the meeting.) He wished to take the opinion of the meeting as to the application of the Fund.

A discussion occurred, on the question whether the donors to the Fund intended it to be applied to preliminary expenses, or to be held altogether in reserve.—The CHAIRMAN recalled the fact, that the Association had voted £50 towards preliminary expenses; whether this would or would not be enough for the year, would turn on a question yet to be discussed—viz., that of confining the Provident Fund to members of the Association, or opening it to the whole profession. If the fund were to be opened to the whole profession, the expenses would, of course, be increased; and under any circumstances, in fact, he thought that the £50 granted by the Association would not be sufficient. The various donors to the Guarantee Fund had expressed very different desires as to its application; some wished it to be applied to preliminary expenses; others, as a reserve.—Several members of the Board spoke on the question; the prevailing feeling being that, while it would be advisable to apply a certain part of the Guarantee Fund to preliminary expenditure, the principle of forming a reserve should be sustained; and that what was now used should be considered as borrowed, not sunk. In accordance with this opinion, it was moved by Mr. SMITH, seconded by Mr. PAGET, and carried—

"That the preliminary expenses be at present drawn from the Guarantee Fund, to be replaced from the General Fund as the Board of Directors may hereafter decide."

*Treasurer.* The CHAIRMAN said he must ask the meeting to appoint a Treasurer. Up to this time, he had undertaken the work; but it was impossible for him to carry it on together with his duties as Chairman.

Mr. LORD proposed, and Dr. COLLET seconded—

"That Dr. Westall be appointed Honorary Treasurer of the Provident Fund, *pro tempore*."

Dr. WATERS thought this would be the most fitting opportunity for bringing forward a question which, in the Branch he represented, and, he believed, in other Branches, was considered of the greatest importance; viz., What was the responsibility of Directors individually, should any liabilities be incurred? and what would be the responsibilities of the Association as a body under the same circumstances? He would ask the Chairman to give his views on that subject.

The CHAIRMAN said that the question had been put by many other members of the Association; and he read a letter from Mr. Southam, in which that gentleman suggested that, if any doubt existed on the point, counsel's opinion should be taken. He (the Chairman) believed that the Association could not possibly incur any responsibility; and that no individual could, as a Director, incur any responsibility except in the case of fraud. In the latter case, he did not know whether the liability would fall solely on the delinquent, or on the directors at large. Even in this extreme case, the responsibility must necessarily be very small, presuming that the Directors did their duty; for, as the meetings would be held at least four times a year, and the accounts balanced on each occasion, the responsibilities could never exceed those of three months' standing. It had been asked, If it were found that the sums paid by subscribing members did not meet the requirements of sick members, what steps would have to be taken? To this he replied that the remedy was obvious. The Directors would have to summon a meeting of the subscribers; and the terms of subscription would have to be raised according to the necessities of the case. At the present moment, however, the Directors could do no more than take the soundest possible actuarial basis for their plan, and put it practically to the test.

Mr. HECKSTALL SMITH said he took, if he might be allowed to say so, a stronger ground than the Chairman. The legal bearings of the case would be identical with those which obtained in benefit clubs enrolled under Act of Parliament. The responsibility would be distributed over the whole of the members who subscribed to the Fund and took advantage of its benefits. It was purely a matter of mutual trust between member and member; the Directors being merely the representatives of the members, and responsible only with the members themselves. Even in case of fraud, the loss sustained would be distributed over the whole of the subscribing members; and no one would be implicated as to the whole sum except the fraudulent person or persons. As regarded the Association, it would be impossible to attach any responsibility to it; the Board of Directors being entirely separate from the Executive of the Association; the funds being entirely different; and the objects of the Provident Fund being clearly defined. For his part, he would not have been a Director for an hour, if he were not legally sure that the responsibilities were divisible among the whole of the subscribing members.

After some further discussion, Dr. WATERS expressed his entire satisfaction with the manner in which his question had been answered. He hoped

that the explanations given by the Chairman and Mr. Smith would be fully reported.

The motion, for the appointment of Dr. Westall as Treasurer, was then put to the vote, and carried.

*Secretary.* Dr. WATERS moved—

"That Dr. Henry be appointed Secretary of the Provident Fund for three months."

The motion was seconded by Mr. CARTER, and carried.

It was then proposed by Mr. DANIELL, seconded by Dr. BRYAN, and carried—

"That the remuneration of the Secretary, for the three months, be £25."

*Executive Committee.* Mr. PAGET moved, and Dr. STEWART seconded—

"That the following gentlemen constitute an Executive Committee, to draw up rules and regulations for the government of the Provident Fund, and to submit the same for approval and adoption by the Board of Directors: The Chairman; Dr. Westall; T. H. Smith, Esq.; Dr. Armstrong; C. F. J. Lord, Esq.; Dr. Falconer; J. Clay, Esq.; Dr. Fayrer. The Chairman to convene the members of the Committee, and to have a casting vote. Three to be a quorum."

Mr. CLAY wished, before the motion was put, to ask under what constitution the Fund would be placed. In the Report read at Cambridge, three plans were suggested; viz., a Charter of Incorporation for the Association; enrolment under the Friendly Societies' Act; or independent organisation. Before the Executive Committee could draw up any regulations, it must be advised on this point.

The CHAIRMAN said that it had been determined by the Committee of Council of the Association, with whom this particular question rested as much as with the Directors, that an effort should be made to obtain a Charter, and to place the Provident Fund under the bye-laws of that Charter. This failing, the Directors would probably have to cause the Fund to be enrolled. Both plans would give it a legal standing; and there were advantages, and disadvantages, attending both; but, as the Committee of Council had determined on one course, the present Board could not do otherwise than wait. This delay need not interfere with the drawing up of rules, which might be framed on the very safe basis laid down by Mr. Tidd Pratt for friendly societies, and legalised, might be acted on temporarily, and embodied in the bye-laws if a Charter were obtained, or consolidated if the society were enrolled.

Mr. CLAY wished particularly to know whether, in the event of a Charter being obtained, the bye-laws of the Association relating to the Provident Fund would be submitted to the Directors by the Committee of Council previously to being passed.

The CHAIRMAN said there could be no doubt that any bye-laws proposed by the Committee of Council would be laid before the Board.

The resolution was then carried.

It was proposed by Mr. CLAY, seconded by Mr. GRIFFITH, and carried—

"That the Executive Committee be instructed to print the rules and regulations when determined on, and to circulate the same among the Board of Directors a month previously to their next meeting."

*Instructions to the Executive Committee.* The CHAIRMAN said that, before the Executive Committee commenced their work, there were certain points on which they ought to be instructed by the whole Board now assembled. He would limit such instructions simply to questions that were of the largest professional interest; and respecting which he had received most inquiries. He would first take the opinion of the meeting on the point, *whether the benefits of the Fund should cease at sixty years of age.*



A long discussion followed. Mr. HECKSTALL SMITH was against the limitation of benefits to 60; but felt that there ought to be a limitation to the age of entry. He would limit entry to persons under 45 years of age. If that were not done, then limitation of the benefits to 60 was requisite.—Mr. CLAY thought that it was actuarially sound to enact the limitation; and placed before the Board a very elaborate series of facts shewing the amount of sickness at various ages.—Mr. DANIELL was strongly opposed to any limitation. If members chose to pay an extra subscription *pro ratâ*, he did not see why they should be deterred from doing so.—Dr. BRYAN said that the limitation suggested would prevent very large numbers of the Branch which he represented from taking any interest in the Fund.—Mr. PAGET concurred. He thought it would be a most unwise policy to appear even to exclude any member of the profession on the ground of his age. It was natural that a man at 60 must pay, for the same benefit, a sum much larger than a man at 30 would pay; and in this manner, he believed, any danger that might be feared would rectify itself.—Dr. CHEVALLIER said that, as the periods for which a man would receive relief would necessarily be limited to certain fixed periods, that would act in preventing danger.—Dr. STEWART said that his sympathies were entirely with those who would have no limitation; but, in the interview which he and the Chairman had had with Mr. Tidd Pratt, he (Mr. Pratt) had dwelt so emphatically on the necessity of the limitation, that he (Dr. Stewart) felt sure that the stability of the Fund would be much influenced by the way in which the question was determined.—Mr. CARTER thought that the limitation would be necessary.—The CHAIRMAN, in closing the debate, said he was as anxious as any member present to see that the Fund applied without limitation of age; but his calculations as to days of sickness, made quite independently, so entirely accorded with those of Mr. Clay, that he was afraid to join so warmly as he could wish with many of his friends. He would like to reconsider the question, with the view of determining if some new method could be adopted, on sound calculation, which should remove the limitation. He could wish that the meeting, while expressing its sentiments generally, should not bind the Committee to draw up a rule negating limitation, but should leave it open for them to consider the matter further.—The following resolution was then proposed by Mr. PAGET, seconded by Dr. FAYRE, and was carried unanimously—

"That the Directors, sharing in the general desire to extend the benefits of the Fund beyond sixty years of age, specially instruct the Executive Committee to examine into this point, with a view to such extension; and to embody their decision in their Report."

The CHAIRMAN then asked for instruction on the point, *whether the Fund should be applied to cases of disability from accident as well as from disease*. He read a letter from Dr. Radclyffe Hall, suggesting that accidents should not be included; and also a resolution passed by the South-Western Branch to the same effect.—Dr. DESMOND, Dr. BRYAN, and Mr. CLAY took part in the discussion. Dr. BRYAN thought it would be almost impossible to define amongst medical men what was and what was not an accident. He asked whether or not a dissection-wound would be considered an accident.—Ultimately, the following resolution, proposed by Mr. DANIELL, and seconded by Dr. CHEVALLIER, was carried unanimously.

"That the Committee be instructed to include accidents in their rules as a part of the benefit scheme."

The next subject discussed was the question, *whether or not the Fund should be confined to members*

*of the British Medical Association, or open to the profession at large*.—Mr. CARTER moved—

"That the Directors instruct the Committee to make rules for the admission of members of the profession generally."

Mr. CARTER, in moving the resolution, urged that it would be a great injustice to the profession generally to limit the benefits of the Fund to members of the Association. There were many professional men of small income, who would be most anxious to join the Fund, but who could not afford to join the Association also; and some might subscribe to both for a time, and afterwards leave the Association. But it would not be just to ask them to forfeit what they had paid to the Fund because they chose no longer to belong to the Association. He further stated that, if the Fund had not been started by the Association, it would have been commenced by himself and several other gentlemen with whom he had been in communication; and that although, finding the Association was about to take up the same question, and seeing that it had special facilities for carrying out the scheme, he had deferred to it, he still considered that the plan should embrace in its organisation the profession at large. Such extension would, he believed, increase the number of subscribers to the Fund, and do good rather than harm to the Association.

Mr. DANIELL seconded the resolution. He said he must claim precedence of Mr. Carter in suggesting a relief fund for the whole of the profession. He had, in fact, originated and for a time carried on a fund of this description, than which nothing could have worked more satisfactorily, had it been possible at the time to manage it better. Indeed, the society ceased with some hundreds of pounds in its hands. His scheme was much wider than that now contemplated; and he hoped that the present plan might ultimately be enlarged, while he fully approved of commencing with the single and simple object of giving relief in sickness. The present undertaking commenced under far better auspices than his own. He had not a penny with which to meet preliminary expenses; and all the expenses (which were very large) were met from the contributions of members. His friend Dr. Richardson, in this movement, had been wiser; for he had raised a fund before there were any expenses; and the expenses themselves promised to be small. To limit the benefits to members of the Association would be a very narrow policy: to open it to all would necessarily, he believed, add to the ranks of the Association; but, even if it did not, the Association ought to take the higher ground of usefulness, and give to the scheme the widest application.

Mr. PAGET warmly supported the proposal for the extension of the benefits of the Fund to the profession. He did not think the Association could be too liberal.—Mr. VEASEY, as President of the South Midland Branch, wished to express, on the part of the Branch, their almost unanimous desire that the Fund should be extended.

The CHAIRMAN read a resolution from the South-Western Branch, recommending that a request should be inserted in the BRITISH MEDICAL JOURNAL, that each member of the Association should communicate to the Chairman of the Directorate his feelings in the matter, and that the wishes of the majority should be carried out. Speaking on the whole question, he felt now, as he had from the first, that it would be most desirable to extend the Fund to the whole profession, if it could be done safely. It was on this point of safety that he had hesitated. The difficulty was this: that the Directorate, as now constituted, was purely connected with the Association; and he

did not see, therefore, how those gentlemen who joined the Fund, and were not members of the Association or of any of its Branches, could be represented in the management. He felt that the distinction between represented and unrepresented members might lead to difficulties of a very serious nature. He fully agreed with Mr. Carter as to the justice of throwing the Fund open; while he felt that no organisation could be more perfect for the special working of such a Fund than that of the British Medical Association. The Branches of the Association were so many ready-made centres; the members of those Branches knew best who in their respective districts would be most likely to join in the movement, and, above all, who would be most likely, from particular knowledge and earnestness, to serve as competent Directors. So far, the organisation had proved itself well; for he had no hesitation in saying, that no small section of men outside the Association could have brought together from the various parts of England such a Directorate as had been elected; and he believed that the profession at large, when it saw the names of the Directors elected by the Committee of Council and by the Branches, would be of the same opinion. Thus the Association possessed the organisation; while the profession altogether required to take part in the measure, could the two elements be united. On the whole, he thought that the demand to admit the profession altogether overruled, though it did not meet, the difficulties he had suggested; and he should therefore vote for the extension, in the hope that some plan might be suggested by which those difficulties would be removed.

Mr. HECKSTALL SMITH, while admitting the desirability of extending the Fund beyond the Association, saw the greatest difficulties in the way of extension, so long as the Association held the sole management. Within the bounds of the Association, the scheme was in unity with the work of the Association, and was easily managed. There could be no discordance, because every man had a voice in electing representatives to the governing body; and those representatives were responsible to their Branches for the performance of their duties. But if a large number of members came in from without, who would represent them? and would they be content to be unrepresented? He confessed that he was a strong advocate for carrying out the Fund, for a time at least, purely within the Association; and he should only fail to vote for this, because he felt he must bow to the opinion of the Chairman, who had given so much thought to the matter, and had shewn such valid reasons why the Association should be the organising body, and because he hoped, with the Chairman, that, as members came in from without, some plan might be devised by which they could be enabled to have a voice in the management.

Mr. GRIFFITH suggested that the Fund should be confined to the Association for two years.—After some remarks by Dr. FAYRE, Dr. DESMOND, Mr. CLAY, Dr. ARMSTRONG, and other Directors, most of them being in favour of extension, the resolution for extension was put, and carried unanimously.

The next subject discussed had reference to instruction to the Executive Committee in respect to the question whether relief should be granted to members suffering from partial disability from disease or accident.—Dr. LATHAM proposed, Mr. CLAY seconded, and it was carried—

"That there be no system of partial relief introduced into the regulations of the Provident Fund."

It was next discussed, whether by payment of multiple premiums, members should be allowed to insure so as to secure, during sickness, proportionately in-

creased benefits.—Dr. WATERS proposed, and Dr. FAYRE seconded—

"That, for the first two years from the commencement of the Society, no member be allowed to subscribe more than will entitle him to receive £2 a week when incapacitated by sickness or accident."

Dr. CHEVALLIER, Mr. CARTER, Dr. FALCONER, Mr. CLAY, and the CHAIRMAN, took part in the discussion. The resolution, on being put to the vote, was carried.

*Bankers to the Fund.* Mr. CLAY proposed, Mr. LORD seconded, and it was resolved—

"That the Guarantee Fund be deposited in the Union Bank of London, in the names of the Chairman and Treasurer, and that all cheques be signed by them conjointly."

*Collection of the Guarantee Fund.* Dr. LATHAM proposed, Dr. FAYRE seconded, and it was resolved—

"That the Chairman and Secretary be authorised to call in the several sums promised to the Guarantee Fund."

It was agreed that the next meeting of the Directors should be called by the Chairman, on the recommendation of the Executive Committee, after the preparation of their Report.

A vote of thanks to the Chairman, and to Dr. Falconer for acting as Honorary Secretary, having been proposed by Dr. DESMOND, seconded by Mr. LORD, and carried, the proceedings closed.

Dr. RICHARDSON begs to announce the following contributions to the Guarantee Fund—

|   | £.  | s. | d. |
|---|-----|----|----|
| Amount already contributed.....                   | 511 | 5  | 0  |
| Thomas Parry, Esq. (Leicester).....               | 10  | 1  | 0  |
| Dr. Armstrong (Gravesend).....                    | 10  | 10 | 0  |
| T. H. Smith, Esq. (St. Mary Cray), additional.... | 5   | 5  | 0  |

Further contributions will be announced.

12, Hinde Street, Manchester Square, W.

#### BATH AND BRISTOL BRANCH: MEETING.

THE first meeting of the session was held on October 17th, in the Victoria Rooms, Clifton; R. W. FALCONER, M.D., President, in the Chair. Upwards of fifty members and visitors were present.

*Medical Provident Fund.* R. W. Falconer, M.D. (Bath), and W. Budd, M.D. (Clifton), were elected Directors of the Provident Relief Fund.

The following resolution was proposed:

"That, in the opinion of this Branch, the Provident Relief Fund should at present only be available to members of the British Medical Association."

To this the subsequent amendment was proposed:

"That the Provident Relief Fund should be open to all members of the medical profession."

The amendment, being put from the Chair, was lost, only five members voting in favour of it. The original motion was then put, and carried by a large majority.

The following resolution was then proposed and carried:

"That, in the opinion of this Branch, the benefits to be derived from the Fund should not cease at the age of sixty."

*New Members.* The following gentlemen were elected members of the Parent Association and of the Branch: C. S. Barter, Esq. (Bath); Alexander Waugh, Esq. (Chilcompton); C. Board, Esq. (Bristol); and Joshua James, Esq. (Bristol).

*Papers.* The following papers were read.

1. Death during the Inhalation of Chloroform. By C. Gaine, Esq.



2. Notes on Cancer. By W. M. Clarke, Esq.  
3. Report of a Case of Perinaal Section. By J. W. Teale, Esq.

#### SOUTH MIDLAND BRANCH: AUTUMNAL MEETING.

THE eighth autumnal meeting of this Branch took place at Buckingham, on Tuesday, the 18th instant; the following members and visitors being present—viz., H. VEASEY, Esq., Woburn, President, in the Chair; Drs. Bryan (Northampton); Francis (Northampton); Mackay (Stony Stratford); and Messrs. G. Ashdown (Northampton); R. Ceely (Aylesbury); W. C. Daniell (Stony Stratford); E. Death (Buckingham); G. P. Goldsmith (Bedford); F. L. Harper (Brixworth); G. H. Haslop (Buckingham); C. Spencer (Whitechurch); H. Terry, jun. (Northampton); and E. Watkins (Towcester). As visitors were present, John Manley, Esq. (West Bromwich); and the Rev. Archibald Currie.

The PRESIDENT opened the proceedings with some prefatory remarks respecting the Branch, and also referred to the Provident Fund.

*Report.* Dr. BRYAN (Secretary) read the Report of the Branch, and stated that five new members had joined this year; whereby, after deducting the losses by removal and other causes, the numbers amount to ninety-two. It was much to be regretted that there had been several losses by default in paying arrears of subscriptions; and it was very important that they should be paid early in the year, by which the Secretary's work would be much lightened, and any applications from the General Secretary avoided. The funds of the Branch were in a tolerably good condition; the balance in the hands of the Treasurer at the present time amounting to £3:1:6; the expenditure for the year to the present time had amounted to £11:4:7. Dr. Bryan made some remarks explaining the constitution and objects of the "Medical Provident Fund".

The Report was confirmed and adopted.

*Provident Fund.* It was proposed by Dr. FRANCIS, seconded, and carried unanimously—

"That there be no limitation of age in regard to participating in the benefits of the Provident Fund; that it be thrown open to the whole profession; and that accidents as well as diseases should be provided against."

*New Members.* The following new members were proposed and elected:—Arthur Evershed, Esq. (Ampt-hill); Robert S. Stedman, Esq. (Sharnbrook); and G. H. Haslop, Esq. (Buckingham).

*Papers.* The following papers were then read.

1. On some Remedial Results in Epilepsy. By D. J. T. Francis, M.D. Five cases were given, in which the bromide of potassium was taken in doses varying from five to thirty grains, and persisted in for some months, with apparently most satisfactory results. The sedative power of the remedy manifested itself in a few days, and no injurious results followed. Nearly all the cases were in early life; the oldest being aged 25. A very interesting discussion took place, in which most of the members present took part.

2. Case of Puerperal Convulsions. By G. P. Goldsmith, Esq. In this case, bleeding at the arm had been performed, and delivery was effected by the short forceps. A good recovery followed, after a few days. Considerable discussion took place, which was shared in by Dr. Bryan, Mr. Ashdown, and Mr. Watkins. Mr. Watkins had had several cases within the last few years; they had made good recoveries without venesection, merely under the use of chloroform,

shaving the head and applying ice to it, with enemata, and delivery as soon as possible.

Five other papers were on the list for the meeting, but were not read, owing either to the proposers not being present, or time having expired.

The next Annual Meeting was arranged to be held at Northampton, under the presidency of George Ashdown, Esq.

*Dinner.* The members and visitors then adjourned to the White Hart Inn, where they partook of an excellent dinner, and separated at an early hour, after a very pleasant and instructive meeting. All had previously partaken of a handsome luncheon, provided at the house of Robert Death, Esq.

#### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will take place at the Fountain Hotel, Canterbury, at 3 P.M., on November 17th. Gentlemen wishing to read papers are requested to forward their names forthwith to the Secretary,

ROBERT BOWLES.

Folkestone, October 1-64.

## Correspondence.

#### TREATMENT OF PARTURIENT WOMEN.

LETTER FROM ALBERT NAPPER, ESQ.

"Magna est veritas, et prevalat.".

SIR,—Such is the apt motto adopted by Mr. Pope in his reply to a theory advocated by Dr. Graiy Hewitt in a clinical conference on midwifery lately held at St. Mary's Hospital Medical School. Mr. Pope appears to have been so startled by Dr. Hewitt's bold divergence from the old *régime* of "Lowther, Haigh-ton, Churchill, and Co.," that he feels it to be his incumbent duty to ward off the evils to be expected from its general adoption as much as in him lies, particularly as regards the advocacy of a full generous diet—the usual diet of health—for a woman immediately after delivery. That such a doctrine should appear to a practitioner of Mr. Pope's standing (eminent though he be) "monstrous, hideous, huge, and benighted," is not much to be wondered at; nor would I, upon the experience of a quarter, venture to question the dogmas of one whose experience extends over half a century, did I not know that, besides Dr. Hewitt, there are many eminent members of the profession who entertain the same views, and amongst them one, at least, of the most distinguished in this department of medical practice—Dr. Oldham. He, in his introductory address in assuming the presidency of the Obstetrical Society in January 1863, expressed his unqualified approval of the practice now advocated by Dr. Hewitt; and his remarks appeared to be generally acquiesced in by the members then present, and by none more cordially than by myself.

I have long since arrived at the conclusion, that the course of abstinence entailed upon parturient women immediately after delivery has been frequently attended with evil results; and had been cautiously feeling my way in the other direction, when I had the gratification of hearing Dr. Oldham express his entire approval of the practice, and state that he had been in the habit for many years past of allowing his patients meat and mildly stimulating diet, even on the very day of their delivery. Fortified by such high authority, I have since with confidence pursued this practice to its full extent, and have had as yet

no reason to regret it. On the contrary, I have found that women who, from a rapid increase of family, have ceased to be able to suckle their children, have, by adopting a liberal and stimulating diet immediately subsequent to delivery, been enabled liberally to support their offspring, and at the same time have recovered their wonted health in much less time than before.

That Mr. Pope should be wedded to a course of practice which in his hands has been most successfully pursued during so long a period, is very natural and reasonable; but since, in other hands, "milk-fever, puerperal peritonitis, puerperal mania, sudden deaths, and protracted convalescence," have been of no uncommon occurrence under the same system of treatment, it yet remains to be shown whether, under the more liberal plan above advocated, the results may not be far more favourable. So important a subject as this cannot long fail to meet with the consideration of the Obstetrical Society, on which occasion, I am sure, the members would be gratified by the attendance of Mr. Pope as a fellow.

I am, etc., ALBERT NAPPER.

Cransley, October 13th, 1864.

#### LETTER FROM THOMAS INMAN, M.D.

SIR,—Though I do not now attend other midwifery cases than two very near relatives, I have a vivid recollection of my past experience, and have many opportunities of collating it with present practice. When a student, I well remember my horror, and consequent remonstrances, at finding a woman take a quart of ale twelve hours after delivery, and announce her intention of continuing a practice she had already found benefit from. I watched the case earnestly, and to my surprise, found that the woman was right; for I had never then heard of a recovery so rapid as she made. A sister-in-law was the next patient who took her own treatment in hand. One day's trial of slops after her first confinement produced so much flatulence, etc., that she resolved to adopt her usual every-day diet, and, to my surprise, made a most rapid recovery. Since then she has had eight children, and adopted the same plan with all, and is always going about the house at the end of the first week. Since then I have adopted the same plan with another sister-in-law, and with my wife; and have found them make not only rapid recoveries, but free from a fear of accident. Prior to adopting this method, patients used to complain of excessive sweating, profuse discharge, flatulence, or else of fever; and, as experience has taught us that fevers, suppuration, excessive discharge, windy milk, erysipelas, puerperal inflammation, bronchitis, pyæmia, etc., are all encouraged by exhaustion or debility, we need only be surprised that doctors have required so long a period to learn so obvious a lesson; viz., that it is not wise to weaken still more a woman already exhausted by labour—i.e., *real hard work*. How severe the work I know; for, in conjunction with two other friends, I had once to deliver a woman with the long forceps, in consequence of puerperal convulsions. All of us took our turn at the delivery, and, at the end of three hours, were so completely "done up" that we had to send for a fourth. We finished, however, before his arrival. When we had time for refreshment, do you think we should have liked a basin of gruel? or to be fed on slops for the next four days, while our muscles were aching so much as to make every movement painful? I trow not. And yet each of us had only done one-third of the work the woman would have to do herself. Why, then, should a poor feeble, or any woman who has been exerting a force which few men can estimate, be treated

as if she must have gained redundant strength by the process?

Such small experience as mine might well be sneered at, backed though it be by good sense. I therefore add, that the pupils who have attended my lectures, and the personal friends whom I have been able to influence, have repeatedly communicated to me the results of the doctrine indicated above (which I taught long before Dr. Graily Hewitt had taken his M.D. degree). Their words are uniformly: "I never have a bad case now after confinement. The old complaints we once were familiar with, or read of in books, have for us no existence." Some four years since, an old pupil told me that he had then attended two hundred cases; had treated them on the plan I had suggested; and that he never had any trouble with them—the patients were well and about again at the end of the week. Some of us enjoy a laugh occasionally in seeing how far London is behind, and that the people there are discussing the theory of what has with us become a firmly established practice; but we keep our chuckle to ourselves.

I am, etc., THOMAS INMAN.

Liverpool, October 1864.

#### CHLOROFORM IN FICTION.

SIR,—Your last number contains a letter, signed "C. K.", purporting to "denounce" a tale which is now being published in the Scotch periodical *Good Words*. Your correspondent's version is not only in itself a most confused muddle, but it is so different from the original, that it is scarcely possible he can have seen the latter. The story is not a "romance on chloroform", although a case of death from chloroform is one of its incidents. I have, in vain, looked for any mention of "spiritualists", or of "clairvoyance", or for "quotations of standard medical weeklies to condemn chloroform."

The facts are simply these. Two doctors meet to operate on Lady O. One of these, Dr. D., is an old man; the other, Dr. C., his partner, is not only young, but rash, headstrong, and conceited. Dr. D. has an intuitive perception (and this is the only part of the story with which we could find fault) that Lady O. is not a fit subject for chloroform, and opposes its administration. An accident calls Dr. D. out of the room; and Dr. C. gives larger quantities of chloroform in rapid succession. Dr. D. returns; the operation is performed; but Lady O. does not regain her senses. Dr. D. feels annoyed at his advice being rejected; but, like a good old man as he was, he keeps the secret, and shares the blame with his younger partner. To do this is very trying; for, when the old lady's will is read, it is found that she has left him her "enormous fortune" (£6000)! It looks ugly, and he is suspected; but he disarms suspicion by handing over the fortune to those who, by relationship and poverty, had a natural right to be the old lady's heirs.

This is the incident out of which "C. K." has concocted his ridiculous exaggerations. The whole affair is not worth the space these letters occupy in your JOURNAL. If the public make any deductions at all from Mrs. Wood's story, they will be: 1, that chloroform may be unwisely on improperly administered; 2, that, although "doctors differ", brotherly love and Christian forbearance are not unknown in the profession.

Permit me to add, that the public estimation of chloroform is such that no tale of fiction, however absurd, could in their eyes affect its value. Nor can I suppose that, however irritating this tale may be to a mere "chloroformist", it could for a moment be regarded in the light of a "foul libel" by such men as



"Dr. Simpson", or "all the best men at Guys" (?) As for "the wretched thing called *Good Words*," I dare say, many of your readers know that it is one of the most popular and best conducted periodicals of the day. Edited by a distinguished Scotch divine, Dr. Norman Macleod, its pages are adorned by the writings of such men as Isaac Taylor, Sir J. Herschell, Sir D. Brewster, Principal Forbes, and many others equally noted. Were "C. K." to become a reader of *Good Words*, he might yet be taught not to "denounce" what he does not know. I am, etc.,

W. G.

Torquay, October 19th, 1864.

## THE CASE OF FATAL ATTEMPT TO PROCURE ABORTION.

LETTER FROM JOSEPH STEPHENS, M.D.

SIR,—You have drawn professional attention to the case of fatal attempt to procure abortion, which has recently been the subject of a coroner's inquest at Brighton.

Cases of fatal poisoning by ergot of rye, recognised as such, being rare in this country, a description of the symptoms of such a case shown during life, and the morbid appearances detected after death, will be, perhaps, of sufficient interest to warrant my occupying a certain portion of your space. I will, therefore, with your permission, lay before your readers my notes of the case, and my reasons for deposing that death occurred as the result of the poisonous action of ergot.

I first saw Susan Kingman at 18, King's Road, Brighton, at 10 A.M. on Monday, September 26th. I was told that she was a married woman, and was pregnant; and that it was thought her illness had some connection with her pregnancy. She was in bed, holding her head with her hands; the expression of her face was most anxious, and she complained of excruciating pain in her head; she was constantly retching, and could not retain a particle of either food, drink, or medicine on her stomach, although there was constant and intense thirst; there was præcordial tenderness, but no fulness; there had been diarrhoea, but it had ceased; the head was not hot,—but cold water had been used so freely that it was difficult to judge whether there was any departure from the normal temperature. The pupils were somewhat dilated and rather sluggish; the pulse was rather quick, but very small and feeble; there was a disposition to coldness of the surface of the body, and particularly of the extremities. She complained of great dryness and irritation of the throat, and requested my particular attention to its condition; the whole throat was intensely injected with blood, and on the left side of the soft palate was a dark patch, looking as if blood was effused beneath the mucous membrane. The skin had a yellowish tint. I considered it a case of acute gastritis, and treated it accordingly; the vomiting was, however, quite uncontrollable; the pain in the head continued; collapse rapidly supervened, and when I saw her at midnight she was evidently dying. She had vomited shortly before my arrival, but appeared now to have lost the power to do so, although retching was still incessant. She was partially conscious, and would swallow whatever was given to her with difficulty; she could not, however, speak, although she appeared to make an effort to do so. The extremities were quite cold, and the pulse was imperceptible. By unremitting efforts to maintain the heart's action and to keep up general warmth, by means of brandy and beef-tea, hot water bottles, hot blankets, mustard poultices, and every thing that could be thought of, life was prolonged until half-past seven

A.M., when she died from asthenia, without convulsions.

During my attendance, my suspicions being aroused by the somewhat anomalous symptoms, and by my knowledge that idiopathic acute gastritis was, to say the least, extremely rare in the adult, I made minute inquiries into the history of the patient; and found that it was not true that she was married, but that she had been living in a state of concubinage; and I, moreover, elicited that she had been taking medicine in large quantities for a considerable period for the purpose of procuring abortion. I could not ascertain what this medicine was during the life of the patient; but after her death I succeeded in obtaining a copy of a prescription for a medicine she was said to have taken for many weeks. You have correctly quoted it. On being applied to for a certificate of death from natural causes, I, of course, refused; and subsequently communicated my suspicions to the police.

Under the authority of the borough coroner, Mr. D. Black, I proceeded, fifty hours after death, in conjunction with Dr. Vaughan Hughes, to make a *post mortem* examination, with the following results.

The body was that of a well formed woman, of about 26 years of age. The features were hollow and haggard; the eyes were sunken and dull; the pupils dilated. Dark grumous fluid was oozing from the mouth. The whole body was of a yellowish tint; in fact, semi-jaundiced. There were no external marks of violence on any part of the body; but the insides of the thighs were smeared with blood, which, on minute examination, was found to have issued from the vagina. The mammary glands were quite undeveloped; but the mamillæ were enlarged and elongated; the areolæ were distinct; and the skin of the abdomen had corrugations, such as are seen in those who have borne children. (It came out in evidence that she had two living children.) There was no morification of the extremities.

On opening the abdomen, the peritoneal covering of the stomach and duodenum was seen to be of a rosy tint; there were, however, no adhesions. The liver was of normal size and healthy structure, but was turgid with blood; the gall-bladder contained bile, but was not distended; the bile-ducts were pervious.

Ligatures were applied, so that the stomach, duodenum, and about a foot of the jejunum, might be removed, with their respective contents, for more minute examination. The spleen was of natural size, but congested; the bowels were empty. The womb projected through the brim of the pelvis; and on removal, was found to contain a fetus of four months; the membranes were entire, enclosing a considerable quantity of amniotic fluid; there was, however, slight detachment of one edge of the placenta, accounting for the issue of blood *per vaginam*. There was no appearance of injury to the os or cervix uteri.\*

On opening the thorax, the heart and blood-vessels, lungs and pleura, were found to be perfectly healthy. The right auricle of the heart contained a small clot; the other cavities, a small quantity of dark fluid blood.

The œsophagus and pharynx were then removed for minute examination.

On opening the head, the meningeal vessels were seen to be turgid with dark blood. There was no appreciable quantity of fluid in the ventricles of the brain; although the lateral ventricles appeared abnormally large, as if fluid had distended them, but had been absorbed or had run down the spine. The

\* There had been no uterine pain exerted by the ergot, and, as the flow of blood only ceased a few hours shortly before death, I am disposed to think the slight detachment of the placenta was due to the violent vomiting, rather than to the induction of uterine contractions.

substance of the brain was healthy. With the exception of the parts mentioned as being congested, the body was remarkably exsanguine; and, except the small clot in the heart, the blood was everywhere fluid and very dark.

We finally proceeded to examine the viscera, which we had placed aside, as narrowly as time would allow. On opening the stomach, it was seen at a glance that its mucous membrane had been acutely inflamed; there were deeply injected, circumscribed, arborescent patches, extending from the cardiac to the pyloric orifice, especially on the posterior surface of the viscus, and grouped about the orifices. Over these patches, the mucous membrane peeled off with extreme ease, but nowhere else. There was a small quantity of heavy smelling, dark, coffee-ground-like fluid, of a gummy consistency, in the stomach, and a thick mucus adhered to its walls. The first and second portions of the duodenum had the same appearances; the marks of inflammation, however, gradually diminished on proceeding downwards; the third portion of the duodenum showed but slight traces of it; and the portion of the jejunum was healthy. The œsophagus was quite rotten at its lower part; at the upper part, it was covered with inflammatory patches. The pharynx was extremely congested, and the mucous membrane was considerably thickened.

I then carefully secured the viscera, with their contents, in jars, and proceeded to the inquest-room.

It was now proved that the deceased had taken large doses of tincture of ergot and oil of pennyroyal for many weeks, to procure abortion; and I deposed that, in my opinion, the symptoms during life, and the appearances of the body after death, were fully accounted for by that fact.

The inquest was adjourned; and I took advantage of the interval to make a careful analysis of the viscera and their contents, so that I might be certain that she had not, in addition to the ergot, taken a mineral irritant. My examination was particularly directed to the detection of the salts of copper, as the sulphate is a reputed abortive, and produces somewhat similar symptoms and appearances to those observed. The result of my analysis was, however, a confirmation of my belief that she had died from ergot, as not a trace of any mineral poison was found.

On the resumption of the inquiry, the druggists who had, as was then proved, supplied the medicine for eleven weeks, produced a Dr. Roberts, who stated that Christison did not consider that ergot was a poison; that Taylor was mistaken on that point; and that I was altogether wrong in the opinion I had expressed. He stated that there was no more reason for calling tincture of ergot a poison than brandy; and that, in his belief, it could not primarily cause death.

The case stood thus, when the coroner produced Taylor *On Poisons*, and turned the balance in favour of the view I had expressed. Had it not been for this, as one doctor was pitted against another, the jury would have been in a dilemma, not knowing which doctor to believe.

I do not think any member of the profession will be for a moment in such a dilemma, as everyone, I presume, but Dr. Roberts, knows that ergot was first, I had almost said, discovered from its action as a deadly poison.

It will be well, however, to make it manifest that there would be no mistake about this being a genuine case of poisoning by ergot; and to do so, I will show how closely the symptoms and appearances coincide with those which had previously been recognised as characteristic of the action of ergot.

M.D. Dr. Roberts, Christison says the symp-

toms of ergot-poisoning are, *inter alia*, nausea, vomiting, headache, a small pulse, a yellow skin.

Taylor says it produces dryness and irritation of throat, thirst, burning pain in the stomach, vomiting, etc.; and the cerebral symptoms are headache, and sometimes giddiness and stupor. The appearances after death in a few cases, have been patches of inflammation on the mucous membrane of the stomach and small intestines; sometimes congestion of the brain, liver, and heart; sometimes the blood is black and fluid throughout the body, and the meningeal vessels are found distended, and there is effusion into the ventricles of the brain.

Pereira says, weight and pain in the head, dilatation of the pupils, and stupor, are the principal symptoms which indicate the action of ergot of rye on the brain; there is great depression of the pulse; nausea and vomiting are not uncommon; and the countenance is sometimes yellow.

Casper and Neubert give a case where, during life, there was great thirst, with frequent vomiting, præcordial pain, pallor, and coldness of the surface; and, after death, the mucous membrane of the stomach was found inflamed.

I have quoted briefly and imperfectly, out of consideration for the value of your space; but I think with sufficient fulness to prove my point.

These symptoms and appearances have been observed in cases of chronic poisoning, and also in cases of death from an excessive dose; and I think we may fairly take the case of Susan Kingman as a combination of both; for, after taking it for a considerable period in the prescribed dose, I have been informed, she became impatient at the want of effect, and sometimes took a larger quantity. In the recorded cases, ergot has usually been taken in powder or decoction, and would be much less irritating than the tincture combined with a large dose of the essential oil of pennyroyal. Hence, probably, the excessive amount of inflammatory action established by it in this case. The pharynx bore evident marks of long continued irritation; and I have little doubt chronic inflammation of the mucous lining of the pharynx, œsophagus, stomach, and duodenum had been going on for some time; and that, at the last, the fatal attack of acute gastritis was set up by taking a large dose of the medicine. Had it not been for the irritating form in which the medicine was taken, and for the large doses, it is probable the case would have gone on, and eventually developed the characteristic conditions constituting either "gangrenous" or "convulsive ergotism".

As to the immediate action of a large dose of ergot in this particular form and combination, we have pertinent evidence from a witness, who stated that, "after taking the medicine, the deceased appeared *very strange and faint*." This corroborates what Headland says: "When given in an overdose, ergot has a dangerous action on the brain, producing at sometimes narcotism, at other times syncope." In this case, these two effects appeared to be combined.

In conclusion, I would endeavour to educe some benefit from the consideration of this painful case; and I would ask you, sir, and the profession generally, whether, in your and their opinion, it is proper for a druggist to consider a prescription as a sort of *carte blanche* for the continuous and practically unlimited supply of the medicine thereby ordered. My own opinion is, that a prescription should never be considered to authorise the supply of more than the quantity ordered *on one occasion only*. But in the case of poisonous drugs, and especially of those known to be applied to criminal purposes, I am convinced that it is the incumbent duty of the druggist to stipulate that such a prescription shall be re-ordered and so forth.



either by the original practitioner, or by some other legally qualified practitioner, before it is re-dispensed.

If this plan were invariably adopted, prescriber, dispenser, and patient would be comparatively safe; and, on the occurrence of a case similar to the present one, we should know "whom to hang".

I AM, &c., JOSEPH STEPHENS.

5, Pavilion Parade, Brighton, October 1<sup>st</sup>, 1864.

## Medical News.

**APOTHECARIES' HALL.** On October 20<sup>th</sup>, the following Licentiates were admitted:—

Dawson, John, London Hospital  
Jones, George, Goswell Road  
Locking, Benjamin, Coltman Street, Hull  
Oliver, George, Bourne, Lincolnshire  
Ward, Merindale Cowslade, Marklam Square, Chelsea

As an Assistant:—

Smith, William John, Northampton

### APPOINTMENTS.

WALKER, J. P., M.D., has been appointed Professor of Hygiene in the Medical College, Calcutta.

### ROYAL NAVY.

BAWNING, Benjamin, Esq., Assistant-Surgeon, to the *Compass*.  
BUCHAN, Charles E., Esq., Acting Assistant-Surgeon, to the *Hambleton*.  
TODD, John W., Esq., Assistant-Surgeon, to the *Harrier*.  
MANSFIELD, Percy, M.D., Assistant-Surgeon, to Plymouth Hospital.

**VOLUNTEERS.** (A.V.=Artillery Volunteers; R.V.= Rifle Volunteers):—

CHAPMAN, J., Esq., to be Surgeon 3rd Administrative Battalion Middlesex R.V.  
GILLIES, Hugh, Esq., to be Assistant-Surgeon 1st Argyllshire A.V.  
STORMONT, H. J., Esq., to be Assist.-Surg. 1st City of London R.V.  
SCARR, E. J., Esq., to be Honorary Assistant-Surgeon 1st Hertfordshire R.V.  
TWEEDIE, A. C., Esq., to be Honorary Assistant-Surgeon 1st Selkirkshire R.V.

### DEATHS.

PETERS, Edward, Esq., Surgeon, at 17, Upper Belgrave Place, aged 60, on October 19.  
DOVE. On October 11, at St. Austell, aged 74, Mary, widow of Thos. Dove, Esq., Surgeon.  
EMERSON. On October 5, at Upper Norwood, Elizabeth, widow of A. L. Emerson, M.D., Deputy Inspector-General of Hospitals.  
MORGAN, Moses, Esq., L.R.C.P.E., at 12, Charlotte Street, Bedford Square, aged 63, on October 19.  
PROCTOR. On October 18<sup>th</sup>, at Waltham, Essex, aged 91, Harriet, widow of Alexander Proctor, M.D., formerly of Crewkerne.  
ROBERTSON, Archibald, M.D., F.R.S., many years Senior Physician to the Northampton General Infirmary, and one of the Vice-Presidents of the British Medical Association, at Clifton, aged 74, on October 19.  
STEGGALL. On October 23, the wife of John Steggall, M.D., of Southampton Street, Bloomsbury Square.  
THOMAS, Morgan, Esq., Inspector-General of Hospitals, at Queen's Terrace, Woolwich Common, aged 80, on October 22.

MR. FLOWER of the Royal College of Surgeons, has been visiting during the vacation the museums of Liège, Brussels, and other towns of Belgium.

**TESTIMONIAL.** A large number of members of Oddfellows at Wrexham have presented a testimonial to Mr. Cranmer, the assistant of Mr. Dickenson of that town.

**VENEREAL DISEASE.** There is a rumour that government is thinking of forming a committee to inquire into the treatment and prevention of venereal diseases.

**A MEDICAL MAGISTRATE.** Amongst the names of gentlemen who last week qualified for the office of magistrate for the County of Brecknock we are glad to note the name of one who has long been a member of this Association—James Williams, Esq., F.R.C.S. of Brecon.

**OVARIOTOMY.** M. Kœberle of Strasburg announces another successful case of ovariectomy. He has operated thirteen times and lost three of his patients.

**YELLOW FEVER AT BERMUDA.** Seven medical officers have perished by yellow fever between July 2<sup>nd</sup> and September 7<sup>th</sup> of the present year at Bermuda. The *Montreal Gazette* publishes the following: "Yellow fever abating at Bermuda, and medical officers all recovering."

**AMERICAN WAR NEWS.** Assistant-Surgeon G. W. Ellis, United States Volunteers, formerly of Bombay, East India, is missing, notwithstanding the efforts of the Adjutant-General of the army to find him. The reported deaths in the Confederate army, returned at Richmond, up to December 31<sup>st</sup>, 1863, number 57,805.

**KLEPTOMANIA.** The *Ararat Advertiser* reports the following:—"A very singular case came before the Circuit Court on Wednesday. A female of hitherto excellent character appeared in the dock, charged with stealing some articles of baby clothing. The poor woman exhibited the most painful distress at her situation, having, according to evidence adduced, taken the articles from the promptings of a species of kleptomania induced through being enceinte. His honour Mr. Justice Barry, much to the relief of all present, acquitted her on her husband's recognisance of £50, to appear again if called on."

**UNION MEDICAL CONTRACTS.** The following question has been introduced to the Guardians of the Blackburn District by Mr. Corbett, the Poor-Law Inspector of the district. What is the present state of the medical contracts, and whether any arrangements have been made or are contemplated by the Guardians to carry out the recommendation of the Select Committee on Poor Relief, that in future cod-liver oil, quinine, and other expensive medicines should be provided at the expense of the Guardians?

**THE NATIONAL MEDICAL REGISTRATION ASSOCIATION.** We have pleasure in stating that it is the intention of the members of the National Medical Registration Association to invite Mr. Lavies to a public dinner, for the purpose of showing their sympathy and regard towards one, who has rendered valuable services, not only to the Association, but also to the profession. The difficulties with which this society has had to contend, entailed upon Mr. Lavies no ordinary amount of anxiety and considerable pecuniary loss. It is to be hoped that the members of the Association will embrace this opportunity of doing honour and justice to their president. The dinner will take place on the November 23<sup>rd</sup>, at the Freemasons' Tavern, William Fergusson, Esq., F.R.S., taking the chair. William Adams, Esq., 37, Harrington Square, N.W.; Dr. Tilley, South Lambeth, S.; and Jabez Hogg, Esq., Bedford Square, W.C., will act as honorary secretaries.

**INSPECTOR-GENERAL OF HOSPITALS, MORGAN THOMAS,** died at his residence, 2, Queen's Terrace, Woolwich Common, on Saturday last, at the age of 80 years. He entered the army as an assistant-surgeon in 1804, and served in the campaign in Italy in 1805, including the occupation of Sicily. He was also at the descent on the coast of Calabria, at the battle of Maida, and siege of Scylla Castle in 1806. He afterwards accompanied the expedition to Sweden, under Sir John Moore, and subsequently in Portugal and Spain up to the retreat to Corunna. He obtained the rank of surgeon in 1811, and in 1815 was present at the capture of Guadaloupe. He was promoted to be assistant-inspector, July 14<sup>th</sup>, 1836; deputy-inspector-general, January 16<sup>th</sup>, 1841; and inspector-general, April 1<sup>st</sup>, 1850. He had received the silver war medal with two clasps.

A NEW NAME. M. Gibert has given homœopathy a new name—"homœoniaserie."

BEQUEST. By will Zadoc Aaron Jessel, Esq., has left amongst others the following bequests. Jewish Hospital, Norwood, £100; London Hospital, £100; Free Hospital, Devonshire Square, £100; University College Hospital, £50.

DR. W. H. O. SANKEY has become the proprietor of Sandywell Park Asylum, near Cheltenham; he received the licence at Quarter Sessions, Gloucester, on the 18th instant, *vice* Dr. Hitch and Mr. J. Yorke Wood.

KING'S COLLEGE, LONDON. The result of the examination for the scholarships offered for competition among medical students beginning their first winter session was announced by the Council on Friday last. The following are the successful candidates:—For scholarships of £25 for three years, Baxter and Curnow; for scholarships of £25 for two years, Fiddian, Garrod, McGill, and Bland.

THE VICTOR TOWNLEY CASE. The visiting justices of the Derby County Gaol have tendered their resignation, on the ground that the refusal of the magistrates to ratify their recommendation for the dismissal of Mr. Gisborne, the gaol surgeon, who had given evidence in favour of Townley's insanity, implied a want of confidence in them, which materially lessened their influence in the gaol. Some discussion arose, which resulted in the visiting justices consenting to act for another quarter, in anticipation that, in the meantime, Mr. Gisborne would express his sorrow for what he had said and written.

TESTIMONIAL TO EDWARD DANIELL, ESQ. At the anniversary meeting of the Chandos Lodge of Odd Fellows, at Newport Pagnell, held on the 14th inst., a testimonial was presented to Edward Daniell, Esq., who was about to retire from the post of surgeon to the lodge, which he had held from its establishment twenty-five years ago. The testimonial consisted of a silver inkstand, having a rich ink glass with silver top, together with a silver pen and pencil case and gold pen. On the inkstand was engraved the following inscription:—"Presented to Edward Daniell, Esq., by a voluntary subscription of the members of the Chandos Lodge, as a token of their esteem. Newport Pagnell, October 14th, 1864." Mr. Daniell gave a short address on the advantages of benefit societies, and also gave some useful advice to those present on other subjects. The vacancy occasioned by Mr. Daniell's retirement was filled by the appointment of Charles Terry, Esq.

AN INDIGNANT DRUGGIST. A correspondent of the *Chemical News* is very angry with the Government Report on Poisonings. There may, however, be some truth in his remarks worthy of the prescriber's attention. "A great effort has been made to raise a storm of obloquy against us, for failing which probably happens less often to us than to prescribers. These have an advantage which compounders unfortunately cannot command. Some one comes after them who can correct their blunders. I, for example, have had some experience in dispensing—as much as most indeed,—and I am not conscious of having caused the death of a single individual. But I am confident that I have saved more than a dozen lives by detecting the mistake of prescribers. Going into a West End shop not many months ago, I was shown a prescription in which a physician had ordered morph. hydrochlor. gr. iij; ext. hyoscyam. gr. ss., to be taken at bedtime. 'A general practitioner,' as Mr. Deane said, 'may and does make numberless mistakes with impunity, because the facts are confined to himself and his own surgery.' I could tell of a few, but I do not wish to

throw stones. But there is one advantage which the general practitioner has over the chemist to which Mr. Deane did not allude—namely, that the former can sign certificates of death for his own patients. Perhaps if druggists could do the same for their customers, accidental poisonings would be somewhat fewer."

AN OBSCURE DISEASE OF THE BRAIN. The Melbourne correspondent of *The Times* writes:—"I informed you that a convict was lying in gaol under sentence of death for shooting his partner dead while disputing over accounts. Someone started the idea that he must be insane; but the defence of insanity was not set up at his trial, and he was convicted. That one man should shoot another in cold blood, outside the Public Works-office, and surrounded by a group of friends, and should have concealed the pistol about his person for the purpose, could only be the result—in the opinions of certain doctors—of 'moral insanity,' 'moral exaltation,' or 'emotional insanity,' for thus was the alleged mental condition described. As was admitted by all, delusion there was none; but the son of the prisoner asserted that there was insanity in the family in England. The government appointed a commission of three of the most eminent medical men in the colony to examine the prisoner. They, after various long examinations, etc., pronounced him perfectly sane, and the law was left to take its course. Forthwith arose a perfect storm of remonstrant meetings, and of letters from medical men. The ministry being inexorable, were denounced as 'red-handed.' The most demonstrative of these agitators was Professor Halford, the occupant of the anatomy chair at the Melbourne University. In return for his speculations on the state of the prisoner, the latter on the scaffold bequeathed his body to the Professor. The Professor, having expressed himself in common with other medical men to the effect that extensive lesion of the brain would on a *post mortem* examination certainly be disclosed, watched the gaol authorities, got access to the prisoner's body after execution, and made off with his head to the University rooms. The gaol surgeons were in consternation, and appealed to the Sheriff. Law and justice were for a moment at fault. At length it was determined that the Sheriff, accompanied by a justice of peace and by a policeman, should proceed forthwith to the University, and demand the brains. On arrival of the formidable Sheriff, 6 feet 4 inches in height, at Professor Halford's rooms, the Professor was found surrounded by medical men and with the brain before him, the dissecting then proceeding. The Sheriff demanded the public property. Professor Halford asserted that the brains were his by bequest of their former owner. The Sheriff contended, with much force, that the brains were 'the government's brains,' and that a convict on the scaffold had no property even in his own brains. Finally, the gaol surgeons being present, it was arranged that the dissection should proceed, and at the end the brain was pronounced perfectly healthy. The Professor received a reprimand from the Council of the University, and so the foolish business closed. It may be remarked that had this convict been spared, he would, under the operation of an Act of Council here, have been entitled of right to his liberty on any two duly qualified medical men testifying to his sanity. Such a certificate could have been obtained from almost any two medical men in the colony, in which case we should soon have been startled by the spectacle of a man quietly walking about the streets, who only a few weeks before had shot a fellow creature with less concern than most men would exhibit in shooting a dog."



## OPERATION DAYS AT THE HOSPITALS.

|               |  |
|---------------|--|
| MONDAY.....   | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  |
| TUESDAY. .... | Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| WEDNESDAY...  | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.   |
| THURSDAY..... | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.   |
| FRIDAY.....   | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY..... | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

|            |   |
|------------|---|
| TUESDAY.   | Pathological Society of London, 8 P.M.  |
| WEDNESDAY. | Obstetrical Society of London, 8 P.M. Dr. Eastlake, "On the Management of the Third Stage of Labour"; Dr. Wade (Birmingham), "On a Case (Puerperal) of Embolism of the Pulmonary Artery."—Geological.   |
| THURSDAY.  | Harveian Society of London, 8 P.M. Dr. B. Squire, "On the Diagnosis between Syphilitic and Non-Syphilitic Diseases of the Skin."—Linnean.—Chemical.   |
| FRIDAY.    | Western Medical and Surgical Society, 8 P.M. Practical Evening for the Narration of Cases and Exhibition of Specimens. Mr. Holmes will give the Result of Three Successful Cases of Excision of the Hip-Joint, and will exhibit the Patients. |

## DISEASE IN MANCHESTER AND PRESTON.

MONTHLY RETURN of new cases of disease coming under treatment in the four weeks ending August 27th, 1864. (A) At 28 Pauper Charitable and Public Institutions in Manchester and Salford. (Sanitary Association.) (B) In 6 Poor-law Districts and 1 Dispensary at Preston. (R. C. Brown, Esq., Preston.)

|                                 | A. Manchester. | B. Preston. |
|---------------------------------|----------------|-------------|
| Small-Pox .....                 | 26             | —           |
| Chicken Pox .....               | 1              | —           |
| Measles .....                   | 66             | 10          |
| Scarlatina .....                | 1              | 21          |
| Diphtheria .....                | 18             | —           |
| Whooping-Cough ..               | 3              | —           |
| Croup .....                     | 3              | 1           |
| Diarrhoea .....                 | 578            | 150         |
| Dysentery .....                 | 40             | 15          |
| Cholera .....                   | —              | —           |
| Erysipelas .....                | 25             | 6           |
| Puerperal Fever ..              | —              | —           |
| Insanity .....                  | 46             | 5           |
| Bronchitis and Catarrh ..       | 493            | 64          |
| Pleurisy and Pneumonia ..       | 48             | 7           |
| Carbuncle .....                 | —              | —           |
| Accidents and other diseases .. | 4140           | 414         |
| Totals.....                     | 5555           | 706         |

## TO CORRESPONDENTS

\*• All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

F. O.—The symptoms, as described in the papers, immediately attending the death of the Duke of Newcastle, indicate some sudden stoppage to the heart's action. We might conjecture—from the fact of the Duke's long illness—the formation of a clot in the heart, or of its sudden entrance into some one of the large cardiac vessels.

ERRATA.—In the Review of Dr. Handfield Jones's book on the Nervous System, at p. 410, column 1, 2 lines from bottom, for "the *jurantia* being such as modify the form," read "the *jurantia* being such as modify the power"; and at p. 411, column 1, 14 lines from bottom, for "In malarious and other fevers, pyæmia and suppurating foci may depend, etc.," read "In malarious and other fevers, in pyæmia and suppurating foci, they may depend, etc."

F. K.—We cannot undertake to answer the falsehoods and calumnies which are, week after week, published concerning this JOURNAL and its management. The key to all the ravings and wrath in which they are dished up, is very simple. It may be summed up in the words envy and malice. The JOURNAL has been successful beyond expectation in the hands of the present Editor. The number of associates has advanced since 1861 from under 1800 to over 2400. The influence of the Association and of its JOURNAL has never been greater than it now is; never have its annual meetings been more powerful; and never were the contributions to the JOURNAL more numerous and excellent. Envy, being ever dishonest and without principle, naturally seizes upon the occasion; and allows and aids malice and all uncharitableness in the doing of their usual kind of work. With such we cannot deal.

MR. R. B. CARTER AND THE JOURNAL.—SIR: I am anxious to place before the members of the British Medical Association a letter on the subject of the JOURNAL, containing the facts and arguments on which I should rest a motion that will be brought forward by myself or some other, at the next annual general meeting. The motion will be directed to the suppression of the JOURNAL as at present conducted; and it is my wish that the associates should have the question brought under their deliberate consideration before the meeting takes place. In order to state my views fully and clearly, I might require to occupy three, four, or five pages; and my object in writing to you is to inquire whether you would insert a letter of such length, written with such an object, sufficiently early to allow it to be read and considered by the members before the meeting at Lennington. I shall therefore be glad if you will inform me, in an early number—1st, whether you would print such a letter at all; and 2nd, whether you would print it within a month of receiving the copy. If your answers should be in the affirmative, it would probably be four or five months before I should act upon them. But I wish to know whether space and time are at my disposal. It appears paradoxical to ask my journal to assist in advocating its own extinction; but the BRITISH MEDICAL JOURNAL is in an exceptional position, and is the best channel for addressing the members on a subject that must interest all of them. I have therefore determined to state the nature of the communication that I wish to make, and to ask whether it will be admitted into your pages.

I am, etc.,

ROBERT B. CARTER.

Stroud, Gloucestershire, October 22nd, 1864.

[Mr. R. B. Carter's invitation to us to perform the Japanese operation of the "happy dispatch," is, doubtless, worthy of attention; but as we are responsible Editor of the JOURNAL at present, and have not yet vacated office in favour of Mr. R. B. Carter, we must be permitted to exercise Editorial judgment on his as on all other documents, before publishing them. EDITOR.]

ELECTRICITY OF THE METALS.—SIR: Notwithstanding your former refusals to admit my views in your columns, I again, on the principle "that a faint heart never won a fair lady," appeal to you on the ground of the new discovery of "Electricity of the Metals," and request insertion of the accompanying letter.

From daily experience, I am convinced that poultices, splints, bandages, and plasters, can be superseded by the use of the plate splints.

Who can say that there is any great predilection, or even comfort, in poultices? Even the late Mr. Robert Liston denounced them as a mass of filth. Surely, straight splints are anything but scientific; also, bandages are well known to be indifferently and carelessly put on, and often shift through the motion of a limb. As to plasters, their efficiency is too often denounced by lecturers and hospital surgeons, as of no avail, or inconvenient.

It has been well observed, that pressure applied on the surface of a wound or diseased part, caused reparative process or absorption. This requirement is fully obtained in the tin plate splint.

I am, etc.,

WILLIAM PARKER.

Bath, October 17th, 1864.

Extract from Letter.

"The electricity of the metals having been recently offered in a paper which was read before the Academy of Sciences at Paris, by M. Gauguain, and iron and tin, for the first time, having been especially named as producing this phenomenon, it is desirable in this brief notice to show how such combination of metals can be beneficially used (amidst contrary opinions) in the amelioration of human sufferings, as substitutes for many surgical applications; viz., splints, poultices, bandages, plasters, etc., which are now employed in a slovenly, filthy, and unscientific manner."

**INTERMITTENT RESPIRATION.**—SIR: Will you kindly inform me where I can find anything respecting the pathological nature of intermittent respiration? I have lately had a case of disease of the internal vessels, in which the respiration ceased entirely for a period of fifteen, twenty, and even twenty-three seconds during every minute; this state of things lasting more than a week.

I am, etc.,

IGNOTUS.

[Our correspondent may safely trust himself to either of the works on Diseases of Women named by himself. Editor.]

**W. K.**—The Committee appointed by the Royal College of Physicians to inquire into the condition of the Army Medical Officers have, we believe, already obtained valuable information given them by capable authorities. Doubtless, they will be glad to receive any information which may tend to elucidate the subject on which they are engaged.

**THE GRIFFIN TESTIMONIAL FUND.**—SIR: The following subscriptions have been further received on behalf of the above Fund:—G. M. Phillips, Esq. (Hitchin), 10s. 6d.; G. T. Smeatham, Esq. (Great Missenden), 5s.; D. Rice, Esq. (Southam), 5s.; Wm. Allison, Esq. (East Retford), 10s.; C. P. Mann, Esq. (Cosford), 5s.

Amount previously announced £80 2 6. Received at the *Lancet* office, £5 13.

I am, etc.,

ROBERT FOWLER, M.D.,

Treasurer and Hon. Sec.

145, Bishopsgate Street Within, October 28th, 1864.

Dr. E. MORRIS's letter shall appear next week.

### SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. WATKIN WILLIAMS, General Secretary.

Birmingham, October 1864.

**COMMUNICATIONS** have been received from:—THE HONORARY SECRETARIES OF THE WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON; Dr. JOSEPH STEPHENS; Mr. W. LEGGE; Mr. J. VASE SOLOMON; Dr. T. INMAN; THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY; Dr. R. FOWLER; Mr. STONE; Dr. GRAILY HEWITT; Dr. E. MORRIS; Mr. LEGGE; Dr. SANKEY; Mr. HAYNES WALTON; Mr. R. B. CARTER; Mr. R. S. FOWLER; Mr. MORTIMER GRANVILLE; Mr. R. BOWLES; Dr. A. RANSOME; Mr. T. TURNER; Dr. C. TAYLOR; Dr. THURICOM; Dr. MARSHALL; Dr. BUSH; Dr. BRYAN; Mr. S. H. STEELE; Mr. W. MARTIN; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; and Mr. R. L. BOWLES.

### BOOKS RECEIVED.

1. Illustration of the Paths taken by the Nerve-Currents, as they traverse the Caudate Nerve-Cells of the Spinal Cord and Encephalon. By Lionel S. Beale, M.B., F.R.S. London: 1864.
2. Mémoires sur une Fonction Méconnue du Pancréas. Par Lucien Corvisart. Paris: 1864.
3. Introductory Lecture given at the Leeds School of Medicine. By Thomas Nunneley, F.R.C.S.E., President. Leeds: 1864.
4. A Manual of Qualitative Analysis. By Robert Galloway, F.R.S. Fourth edition. London: 1864.
5. Elements of Materia Medica. By Dr. William Frazer. Second edition. London and Dublin: 1864.
6. Photographs of the Diseases of the Skin. By A. B. Squire, M.D. No. III. London: 1864.

### ADVERTISEMENTS.

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THE  
Hastings Prize Essay.

UROCHROME;  
THE COLOURING MATTER OF URINE.

BY  
J. L. W. THUDICHUM, M.D.\*

PREFACE.

THE author has selected a chemico-physiological subject for competition for the Hastings Medal, because it admitted of the combination of literary research with original investigation, and of the direct application of the results of this investigation to the practice of medicine. The greatest care was bestowed upon the original research, so that every datum there given may be considered as finally proved. But the application of the results to pathology and the practice of medicine could not (owing to the limitation of the space) be pointed out, excepting in a few propositions. These propositions the author pledges himself to prove at length hereafter.

The author has made numerous experiments, and always upon large quantities of material; so that upwards of one hundred gallons of urine were evaporated, and a similar quantity worked up in the natural state. His expenses to carry out his investigations have been very considerable. He has devoted a great part of his time to this inquiry during the past twelve months. He will consider himself highly honoured and amply rewarded should he be so fortunate as to become the first recipient of the Hastings Medal of the British Medical Association.

HISTORY OF INVESTIGATIONS ON THE COLOURING  
MATTER OF URINE.

Colouring matter is the most obvious of all ingredients of the urine. It has not to be discovered like urea or creatinine, but it strikes the eye at the first

glance, touches the nose by its odour, and tastes bitter and nauseous when put upon the tongue. It is so prominent, and essentially characterising an ingredient of the renal secretion, that its study and consideration should precede that of any other. It is the alpha and omega not only of urinary analysis, but of urinary pathology.

Nevertheless, it has hitherto eluded the scrutiny of the inquirers who have endeavoured to extract it from the complex mixture to which it is peculiar. Each analyst, it is true, obtained a product more or less defined, and referable to or derived from the colouring matter. Each, too, named his product, without inquiring whether it had not been observed and named before. It was thus that urology became enriched with names apparently denoting different substances. Urophæine, uroxanthine, uroerythrine, urrhodine, uroglauine, urohematine, purpurine, indican, indigo-red, indigo-blue, oxide of omichmyl—these and other names indicate the stages of the inquiry, which had for its object the chemical knowledge of urinary colouring matter. But the results of these labours were so little satisfactory to critical minds, that Vogel, one of the latest authors on urology, declared it impossible that anybody should ever analyse the colouring matter of urine in accordance with the requirements of chemical science. If Vogel had been acquainted with the researches of Proust, he would not have ventured to express such an opinion.

Sixty-three years ago, a French chemist, then resident at Madrid, had more correct notions and better knowledge of the colouring matters of the urine than the authors of the newest treatise on urology. Sixty-three years ago, Louis Proust gave to science the account of researches, which for importance and variety of results, and correctness and beauty of description, stand unrivalled in the literature of animal chemistry; or, indeed, chemistry at large. He published them in the Spanish *Annales de Historia Natural*, March 1800, No. III, p. 275; and in the old *Annales de Chimie*, vol. xxxvi, p. 258. But the beginning of the century was not favourable to the spreading of information regarding purely scientific results. The invasion of Spain by the French destroyed Proust's existence at Madrid. He was robbed of the "silver vessels in which he had certainly evaporated two thousand pints of urine" by the soldiers of his own nation, and his laboratory was destroyed. Scientific men took no notice of his researches then as now. Of this neglect, Proust gently but justly complained; and republished the researches, with few additions or alterations, in 1820, in vol. xiv, p. 260 *et seq.*, of the new series of the *Annales de Chimie*. But it did not avail. Proust was before his time by more than half a century; and he was forgotten by his contemporaries as completely as he is ignored by our own. In 1844, Liebig (*Ann. Chem.*, vol. I, p. 161) drew attention to Proust's papers, remarking that they appeared to have escaped the attention of all authors who had hitherto written upon the subject of urine. But by misapprehending the nature of the bodies discovered by Proust, as derivatives of the colouring matter of urine, and by declaring that they could only be obtained from putrid and not from fresh urine, he neutralised the effect of his own literary discovery, so far as the colouring matter was concerned, and Proust's researches were anew assigned to oblivion.

\* Extract from the Report of Council, presented to the annual meeting of the British Medical Association, held at Cambridge on August 3rd, 1864.

"The Hastings Prize Medal. The adjudicators of this prize have forwarded the following report.

"To Sir Charles Hastings, M.D., D.C.J., President of the Council of the British Medical Association.

"Dear Sir Charles.—We, the undersigned, being the Committee appointed by the Committee of Council to adjudicate the Hastings Gold Medal for 1864 for an Essay on Physiology, beg leave to state that, of six essays sent in in competition, an Essay on Urochrome, bearing the motto 'Original Research', is the one most worthy of the prize.

"We therefore inclose to you the letter accompanying the MS., containing the name of the author, with the seal unbroken; and we will ask you to be good enough to break the seal, and to communicate the award to the President, Dr. Symonds. We will further ask you—in order that he may be present at Cambridge on Thursday next to receive the medal—to inform the author thereof by express, and to express to him our congratulations on the result of his hitherto unsuccessful effort.

"We remain, dear Sir Charles, yours faithfully,

"W. SHARPEY, M.D.

B. W. RICHARDSON, M.D.

A. T. H. WALLIS, M.D.

"London, 29th July, 1864."

"The President of the Council having broken the seal, and examined the inclosure, in accordance with the wish of the adjudicators, your Council has the pleasure to announce that Dr. Thudichum is the successful candidate."

I will here quote what Proust has said about the matters which he discovered, and which he declared to derive from the colouring matter of the urine.

"A fallow, odorous, and resinous substance, appears to me to be the seat" (I read *siège*, instead of *siège*, as probably misprinted) "of the odour, the colour, and the bitter taste of urine. If this resin were not dissolved in urine by the concurrence of so many salts, very little ammonia would suffice to keep it in solution, as it is very soluble in alkalies. If sulphuric or muriatic acid be mixed with an extract which has already been separated from its principal salts, there are immediately set free vinegar, benzoic acid, and resin, which deposits in the form of a black thick oil. On washing it with warm water, and collecting it in a beaker, it assumes the consistence of black pitch."

This description certainly only applies to extracts obtained from previously putrid urine; and from which, consequently, all the urea has been removed in the form of carbonate of ammonia. In so far, Liebig was quite justified in ignoring the word "*recent*", by which Proust describes the urine which served him for the extract from which he obtained the vinegar. If a similar extract is made from fresh urine, such as we define it now, neither vinegar, nor benzoic acid, nor resin, are obtained immediately on addition of an acid. It requires considerable management to obtain the resin from fresh urine; but in the manner to be described hereafter, it can be done with certainty. Liebig then erred only in this, that he asserted that these resinous matters could not be obtained from fresh urine. I continue the extract from Proust.

"It is possible, however, that this product does not exist in the urine as such, but in the form of an oily or greasy substance of the same colour as the urine; perhaps even its resinous character is only produced by the combined action of the air and the heat of the evaporating process. Nevertheless, as it is found with the same properties in various calculi, I do not hesitate in considering it as decidedly resinous. However that may be, its perfect solubility in alcohol, its pitch-like tenacity, and an aromatic odour which approaches that of castoreum, make me inclined to consider it as belonging to the inflammable or over-hydrogenised products.

"Its solution in alcohol does scarcely become pale when mixed with water; it becomes subdivided, and seems at first to dissolve; but afterwards it separates from the fluid, and then gives a black insoluble deposit.

"A very weak solution of potash dissolves it without evolution of ammonia; acids precipitate it from this solution, and with the assistance of warm water the particles reunite, and assume again the consistence of soft resin.

"It dissolves in the mouth and causes a very remarkable impression: it is an acrid bitter taste, which obliges one to spit in a disagreeable manner, analogous to the taste which is experienced when tasting the bulbs of arum. It is consequently its bitterness which is found in the extracts of urine, and in the urea which has not been sufficiently purified from it. Its brownish-yellow and dark colour is exactly the same as that which urine assumes on the surface which is in contact with the air. All these attributes do not permit me to doubt that it is the essential principle which colours and flavours the urine, and the linen moistened with urine when it is heated.

"Its resinous qualities are also supported by the results of its distillation. It fuses, puffs up, yields

little or no water, a slight ammoniacal odour, a large quantity of thick oil, and above all a considerable quantity of charcoal, amounting to 46 per cent. I forgot to incinerate it and to examine its ash; I might have done it; I have had as much as eight ounces of this resin.

"It has also a singular disposition to become reduced to a powder when kept under water. It shows itself in this form even when it is precipitated from too clear an extract. In order to get it coherent and consistent, it is advantageous to take extracts of the thickness of a syrup of melasses. The resin contains benzoic acid, as, when kept in paper during drying, the acid becomes attached to the paper, having left the resin."

The singular disposition to become reduced to a powder when kept under water, can only be explained by the mechanical separation of the brown matter to be mentioned hereafter.

The account which Scharling (*Ann. Chem.*, vol. xlii, p. 265) has given of a body which he extracted from urine, and termed "omichmyl-oxyd", tallies to a great extent with the description which Proust gives of his resin. To guard against the changes which he supposed urine to undergo during evaporation, Scharling concentrated urine by freezing. The particles of ice were removed as long as they were colourless. When they became coloured yellow, the concentration was discontinued. Artificial freezing Scharling found unserviceable, as he could not succeed in making the urine freeze from above downwards, which seems necessary for allowing the solution of increased specific gravity to sink. Urine so concentrated, was mixed with an equal volume of ether, and allowed to stand for twenty-four hours or more, being shaken at frequent intervals. The ether dissolved a part of the oxide of omichmyl, a little urea, and several other matters, which were not determined. The extraction with ether was repeated several times, the ether was distilled off, and the residue was washed with cold, afterwards with hot, water. By this treatment, the urea and the other matters soluble in water were removed, while oxide of omichmyl was left.

Unless the urine upon which Scharling operated had become decomposed during the freezing, he could not have extracted the oxide of omichmyl. In case, however, the urine was not decomposed, then I incline to the belief, from many experiments which I have made upon this point, that what Scharling extracted in the ether was the yellow colouring matter of the urine in its undecomposed state, which, by decomposition under the influence of heat and acids, in particular, the distilling off of the ether, and the action of the hippuric and other acids probably contained in the ether, yields the resin of Proust, or oxide of omichmyl of Scharling. It was, therefore, a mere accident that Scharling obtained any of his oxide; the greater part of the substance furnishing it, the yellow colouring matter, he certainly lost in the washings.

For the purification of the omichmyl oxide, Scharling proceeded as follows. To decompose ammoniacal salts, which he alleges to have adhered to it, it was dissolved in caustic potash, the solution heated to ebullition, and afterwards precipitated with dilute sulphuric acid. The oxide was thereby precipitated in brown flocks. They were collected on a filter, dried, and dissolved in ether; the solution was filtered, and, after addition of a little water, was



evaporated, when the pure oxide of omichmyle remained. The following are the chemical characters of this substance.

It fuses in boiling water, forming a brownish-yellow oil, which, on cooling, solidifies to a resin. It is soluble in ether, spirit of wine, ammonia-water, dilute caustic and carbonated potash and soda. The solution in spirit has an acid reaction. In its dry state, it has a strong odour of castoreum; but on boiling with water, a faint urinous odour is perceived. When the ethereal solution is mixed with a very small quantity of spirit of turpentine, the mixture, after evaporation of the ether, assumes a sweetish aromatic odour, resembling the smell of urine after taking spirit of turpentine or juniper-oil internally. Heated strongly, after moistening with water, until decomposition ensues, it gives out a strong penetrating odour of old urine. Heated more strongly, it takes fire, and burns with a white strongly lighting flame. Red-heat leaves only a faint trace of ash. Boiled with aqua regia, the oxide leaves a yellow semifluid resin. This boiling, performed in a retort, yields a greenish-yellow oil in the receiver, together with some nitric acid and water. This oil, boiled with water, leaves a little yellow resin. The watery solution, on cooling, deposits scaly crystals, which are easily soluble in spirit, volatile, and, when saturated with ammonia, produce a red precipitate in a neutral solution of chloride of iron. This makes it probable that the acid is benzoic, which Scharling believes to have been produced by the action of nitric acid upon the oxide of omichmyle.

The benzoic acid was, of course, derived from the hippuric, with the existence of which in human urine Scharling was not acquainted when he wrote. The oil was partly derived from the hippuric acid, partly from alcohols of the phenyl series, or phenylic alcohol itself. The oxide of omichmyle was, therefore, very impure, as is also evident from all other reactions. But it was nothing else than one of the ingredients of Proust's resin. (See Omicholic Acid.)

Had Scharling been acquainted with the proceedings of Proust, he might have obtained his oxide in quantity, and employed for an useful purpose the labours which he wasted upon the chlorinated and nitrated bodies extracted from the mother-liquor of nitrate of urea. But, finding that his chloro- and nitro-omichmylic acid turned out to be substitution-products of benzoic acid, which he had also obtained from his oxide directly, he, after the discovery of hippuric acid as a natural ingredient of the urine, became disheartened, and abandoned his researches. Omichmyle-oxide was either forgotten entirely, or dragged on a pitiful existence in the small print notices of handbooks.

I repeated the experiment of Scharling upon urine concentrated by evaporation on the water-bath. The ethereal extract yielded the oxide, and yielded the more of it the longer it was heated by itself after the evaporation of the ether. No oxide was obtained, if all superfluous heating was carefully omitted. From this I learned that the oxide was not contained as such in evaporated urine, and that it was formed by heating the yellow ethereal extract with hippuric acid. The yellow matter contained in the ethereal extract, after purification, fitted the description, in some respects, which Heller has given of uroxanthine, and Schunck of indican. By boiling with dilute acids, it yielded the fallow resin of Proust, or the

omichmyle-oxide of Scharling. It never yielded indigo-blue, although a matter was always obtained which had some features analogous to indigo.

Heller precipitated urine by acetate of lead, and evaporated the filtrate to dryness at a low temperature. He then extracted it with ether, which, after evaporation, left uroxanthine, a yellow matter, soluble also in water and alcohol. This, by treatment with acids at a higher temperature, decomposed, yielding a blue matter, uroglaucine, declared subsequently to be indigo-blue; and a red matter, termed urrhodine, declared to be identical with indigo-red.

Heller's urrhodine is "an uncrystallisable brownish red resin, of acid reaction (pigmento-resinous acid), whose solutions in alcohol and ether present so beautiful a red colour," that the name was hence derived. It contains nitrogen, and burns on platinum foil without leaving any residue. (See Omicholic Acid.)

Schunck treated urine with lead salts, and decomposed the precipitates by sulphuric acid. He obtained yellow solutions, which yielded him on standing, or on boiling, indigo-blue and indigo-red. He claims the yellow matter to be indican. This indigo-red, or indirubine, from urine, is not described any further than that it is extracted by alcohol from the mixture of substances which acids produce on boiling in a solution of the yellow matter termed indican. It has a fine purple colour in solution.

This process of precipitating urine with lead-salts, and decomposing the precipitates with acid, had been before adopted by Scherer. He employed alcohol with the hydrochloric acid, and evaporated the solution. The residue, after washing with water, he assumed to be the colouring matter of urine. It was a blackish brown matter, which could be powdered when dry. On burning, it left a mere trace of inorganic residue. It was insoluble in water, a little soluble in hot water, easily soluble in alkalies and alcohol. Its odour on combustion was peculiar, but differed from that of burning urine. A repetition of Scherer's experiments shows that he had obtained principally the red resin of Proust, or oxide of omichmyle of Scharling; mixed, however, with a considerable amount of impurities.

Scherer was succeeded by Harley, who adopted a new process, in so far as he evaporated urine, extracted with alcohol, treated the extract with caustic lime, and dissolved the lime compound so obtained in a mixture of alcohol and hydrochloric acid. From this acid solution the colouring matter was extracted by ether. This ethereal solution left a residue which was dark red, amorphous, resinous, and, dissolved in alcohol or ether, imparted to it a beautiful red colour. It was insoluble in acids, easily soluble in alkalies. On combustion, it left an ash, consisting exclusively of oxide of iron. There is, therefore, no doubt that what Harley isolated, and termed urohematine, in token of its supposed derivation from the colouring matter of blood, was one of the ingredients of Proust's resin and Scharling's omichmyl-oxide. (See Omicholic Acid.)

Marcet evaporated the urine to dryness, extracted with boiling absolute alcohol, and precipitated the urea by absolute ether. The mixture of ether and alcohol was decanted, concentrated on the sand-bath, and its acidity neutralised by some baryta water. After renewed concentration, a few drops of sulphuric acid were added, and the whole treated with a mixture of ordinary alcohol and ether. The fluid

separated into two layers, of which the uppermost was washed with water, filtered and evaporated at a low temperature. There resulted a colorless watery liquid, filled with crystals, which were not hippuric acid; and at the sides of the evaporating dish, red drops deposited. These united to form a resinous matter; had a strongly acid reaction; and, on standing twenty-four hours, crystallised in groups of needles, the centre of the group being in the centre of the drops. It was soluble in alcohol and ether only. The same product could be obtained from the urine without the addition of sulphuric acid, and is, therefore, claimed to have been present in the urine in the free state, or as an immediate principle. I believe this, again, to have been one of the ingredients of the red resin of Proust (and Scharling's omichmyl-oxide), encrusting crystals of urea or benzoic acid. (See Omicholic Acid.)

To my mind there is no longer any doubt that Proust's fallow resin, Scharling's omichmyl-oxide, Heller's urrhodine or indigo-red, Schunck's indirubine or indigo-red from urine, Scherer's colouring matter of urine as subjected by him to elementary analysis, Harley's urohematine, and Marcet's immediate principle, are different expressions for one and the same mixture of substances—namely, of some of the products of decomposition by acids or ferments, or by the influence of air, time, or heat, of a yellow colouring matter contained in the urine.

Equal in importance to this fallow resin, in the appreciation of the whole subject of the colouring matter of urine, is another chemical compound, already described with great accuracy by Proust just sixty-three years ago, in the article already quoted, under the heading of "Particular Black Substance", in the following sentences.

"I have certainly caused two thousand pints of urinal to evaporate, and all in silver dishes; this has put me in a position to seize certain products, which no doubt would have escaped me, had I worked upon smaller quantities. Such, for example, is the resin.

"I must now speak of a black matter, which acids separate at the same time with the resin. For a long time I have suspected that it might be a portion of the resin, which was altered in the relations of its elements, degenerated or hardened by a kind of particular over-oxidation; but I see on the other hand, that it differs from it by properties, which are too much pronounced for it not to be a substance of its own kind.

"It is a black powder, which separates from the resin when it is repeatedly washed with water.

"It is as insoluble in water as it is in alcohol, which latter purifies it from the last traces of resin.

"It dissolves with great facility in potash; but not after the manner of animal substances, which are all destroyed in it with evolution of ammonia and sulphuretted hydrogen.

"From this solution acids precipitate it in the form of a cheesy clot, which is black and voluminous; when dry it shines, and resembles asphalt.

"The resin of the urine is quite different; dissolved in potash, then precipitated by an acid, it collects as a pitch-like matter, like a kind of turpentine; its residues make a dirty colour, and infect with their odour the liquids from which it is precipitated; but nothing of the kind occurs with the black matter; its separation is complete, and it leaves the liquids white. One hundred parts of this matter so purified give by distillation water, very little ammonia, a trace of oil,

and 65 of charcoal residue, which is as much as is ordinarily yielded by common coal.

"This coal after incineration leaves much silica, but I have not sufficiently examined how much, and what the other constituents of the ash are.

"As it is soluble in the most feeble solution of potash, I have no doubt that it is so in ammonia also, which is always so abundant from the destruction of urea. But what is it? whence does it come? It is found in the urine! Is it in its primitive state? Is it a quantity of carbon of which organic assimilation has disembarassed itself? I know nothing about it; but I was obliged to make it known, because some day one may discover relations for it—a filiation which we do not expect at the present moment."

Here, then, is a substance obtainable from every urine, fresh or stale, sweet or putrid, which, having been made known to the scientific world, has nevertheless for sixty-three years eluded the scrutiny of the most caustic analysts, and escaped the notice of the most learned authors. Every person who has read the account which Heller gives of uroxanthine, and Schunck of indican, and of their splitting up into indigo-red and indigo-blue, will of course conceive the probability of this matter being indigo. But it is not indigo. However carefully treated, it yields no crystalline sublimate of indigo-blue; it yields no aniline by dry distillation; and no volatile alkali is obtained amongst the products of its destruction by heat.

As it dissolves with a violet colour in fuming sulphuric acid, forming a sulpho-acid, the baryta-salt of which is insoluble, the substance has an analogy to indigo; but as I have never once, in many reactions, obtained any blue matter, and always have obtained the brown, I have become incredulous as regards the occurrence of indigo among the products of decomposition of colouring matter. I can certainly not explain how the chemists who found indigo failed to find the particular black matter of Proust. I would certainly be less inclined to doubt the occurrence of indigo-blue as a product of decomposition of the yellow colouring matter, had I not the perfect certainty that the red matter, or red resin, the product of the decomposition of colouring matter already discussed, and claimed by Heller, Kletzinsky, Schunck, and others, as being identical with indigo-red or indirubine, has nothing in common with this substance. Indigo-red, as described by Berzelius, is insoluble in dilute acids and alkalies, and thereby differs from the resin obtained from urochrome, which is soluble in both, in particular easily soluble in alkalies. Moreover, I have never found sugar\* as one of the products of the decomposition of urochrome, even when I decomposed it under circumstances where sugar, when once formed, could not have been destroyed again. In short, I was thoroughly unsuccessful in finding indican, or any of its products of decomposition, indigo-blue, indigo-red, and sugar. I was unsuccessful in finding uroxanthine, which had the property of splitting up into uroglauoine and

\* Schunck's reaction for sugar in urine which had been boiled with acids, is described as follows: "If the liquid filtered from these floccs be mixed with a salt of oxide of copper and an excess of caustic soda, it becomes greenish; and if, after being filtered, it be heated for some time, it gradually deposits a tolerably large quantity of suboxide of copper." The reduction of alkaline copper's salt by sugar, appears at once, and is rapidly completed. As the boiled urine required heating for some time, in order gradually to deposit suboxide, this is of itself evidence against the presence of sugar. We shall see subsequently that urine contains always a powerful reducing agent, which is not yet known any closer.



urrohodine. But I was always successful in finding a yellow colouring matter peculiar to the urine, and, as products of its decomposition, the fallow resin of Proust, the particular black matter, and several volatile substances to be discussed hereafter.

Having thus, as I believe, put the question of the colouring matter of the urine upon its proper basis, I shall next describe the experiments, which led to the above and the following conclusions. I consider that there is one colouring matter in the urine, to which I appropriate the name of *UROCHROME*. By oxidation under the influence of air, this yellow matter passes into a red modification, corresponding to the matter hitherto described as *urerythrine*. By decomposition under the influence of acids and time, or of acids and heat, this yellow soluble matter, as well as its red modification, yield three insoluble ones: the fallow resin of Proust, or "*Uropittine*"; a resinous acid, corresponding with *omichmyl-oxide*, "*Omicholic acid*"; the particular black matter of Proust, or "*Uromelanine*"; and several volatile bodies; amongst them, perhaps, a neutral essential oil of peculiar properties, and several acids. Perhaps a fixed soluble product of decomposition remains in the mother liquor. Under any circumstances, the process of decomposition is very complicated, and will yet require considerable study before it can be satisfactorily formulated.

While I shared the impression, that evaporation of the urine destroyed the colouring matter, I employed metallic salts for its precipitation from variously prepared urine. Salts of iron, tin, copper, lead, and mercury, were thus employed upon large quantities of material, and the precipitates further treated as far as appeared expedient. Each of the experiments afforded important information. Some yielded curious reactions; the most remarkable being those of chloride of iron and nitrate of oxide of mercury. When I had found that unchanged *urochrome* could be extracted from evaporated urine by means of ether, I combined the methods of precipitation, in which lead and mercury salts had been found to be most useful, with those of extraction. But ultimately, I found it practical to prepare a concentrated extract of urine, and to precipitate the *urochrome* by lead and mercury salts, and to disregard entirely the slight change which takes place in a small portion of the *urochrome* during evaporation. For I had found that an extract of urine boiled for six hours with ten per cent. of concentrated sulphuric acid, did yet contain a large amount of unchanged *urochrome*; the colouring matter was protected from the effect of the acid by the urea in the same manner as I have shown\* the *hippuric acid* to have been under the same circumstances.

#### MODE OF OBTAINING UROCHROME.

##### *Prepared Urine.*

The urine is made alkaline by dissolving in it fused or unslaked caustic baryta (5 grammes to 1 litre) contained in a little sieve suspended in the fluid. When the fluid, after brisk stirring, remains strongly alkaline, it is treated with a saturated solution of acetate of baryta, as long as a precipitate is thereby produced. The deposit is allowed to settle during twelve hours, after which the fluid is filtered.

Urine thus prepared is free from phosphoric, sulphuric, and carbonic acids, and has lost a portion of its uric acid. It contains free alkali, combined acetic acid, and a little baryta, besides the other ingredients of urine. Nitrate or chloride of barium should not be employed in this preparation, as the presence of nitric acid and an augmentation of chlorides, interfere with subsequent operations for the isolation of *urochrome* by means of mercury-salts.

##### *Limed Urine.*

The urine is treated with unslaked lime in the form of powder, or slaked lime in the form of dry powder, until it presents a strongly alkaline reaction; after twelve hours standing, it is filtered.

Urine thus treated contains no phosphoric acid; if it do give a precipitate with chloride of calcium, enough lime has not been added. It contains free alkali, particularly lime, and is in a fair state of preparation for the application of lead-salts.

##### *Prepared Extract of Urine.*

The urine is evaporated over the free fire to one-tenth, and filtered from the phosphates, urates, and gypsum. It is then slowly evaporated on the sand-bath, until a pellicle of urates forms. After cooling and filtering, it is evaporated on the water-bath to a syrup, and allowed to cool slowly with the water-bath, to effect a good crystallisation of chloride of sodium, urea, and other salts. The decanted syrup, if necessary, mixed with a little water, is treated with best calcined magnesia, until alkaline, and until a filtered sample, treated with acetic acid and chloride of iron, does not give any immediate precipitate. The extract is then filtered. An extract thus prepared, contains neither phosphoric nor uric acid, a diminished amount of sulphates, and a small amount only of chlorides. It contains free alkali, particularly ammonia and creatinine, but no magnesia. It is, therefore, particularly suitable for the application of lead-salts.

##### *Mode of Obtaining Urochrome from Inspissated Urine by Ether.*

Fresh urine is evaporated on the water-bath, treated with a little hydrochloric acid in the cold, and extracted with ether. The ethereal solution, on distillation of the ether, leaves a residue which deposits *hippuric acid* on mixing with water and standing. The acid is separated by the filter, and the washings are united with the filtrate, whereby a deposit of resin is produced. This is allowed to subside, and the fluid is separated again by filtration or simple decantation, the resin adhering mostly to the walls of the glass vessel. The fluid now represents a beautiful bright saturated golden-yellow solution, having a strong odour of phenylic acid, mixed with a reminiscence of the ether. It contains *hippuric acid*, *phenylic acid*, and a trace of hydrochloric acid, besides *urochrome*, which constitutes the greater part of its ingredients. A solution of basic acetate of lead is now added to this fluid; at first, this causes only a turbidity, and no permanent precipitate is produced. It is mostly only after large quantities of basic acetate solution have been added, that a permanent bay-coloured, or Naples yellow, flaky precipitate of considerable bulk is produced. When the fluid is almost colourless, and the acetate produces no further precipitate, all the *urochrome* is in insoluble combination with lead. This precipitate is now collected on a

\* In my "Researches on the Physiological Variations of the Quantity of Hippuric Acid in Human Urine," *Journal of the Chemical Society*, February 1864, ser. 2, vol. ii, p. 59, et seq.

filter, and washed. It is well disposed towards this operation, which must, therefore, be performed thoroughly. It may even be removed from the filter and boiled with water, and filtered while hot; for too much care cannot be taken to remove chlorides, which adhere with great pertinacity to all compounds of urochrome.

This compound of lead and urochrome may be suspended in water, and decomposed by sulphuretted hydrogen, when a yellow watery solution of urochrome is obtained, after boiling with the sulphide, cooling and filtering free from any gross impurities, but still mixed with a trace of phenylic acid.

To free it from these slight impurities, the lead compound of urochrome, instead of being decomposed by sulphuretted hydrogen, which requires subsequent boiling to remove the excess of this agent, is decomposed by the cautious addition of dilute sulphuric acid in the cold, while the salt is triturated in a mortar. A slight excess of the acid is useful to decompose the salt entirely, but is immediately neutralised by the addition of some carbonate of baryta. The yellow solution is now separated by filtration, treated with baryta-water until alkaline, and then treated with carbonic acid until neutral, and allowed to stand. By this treatment all resin is removed from the solution, which is now purely yellow.

To this solution, pure neutral acetate of mercury is now added, as long as a precipitate is thereby produced; the limit has to be ascertained by repeated filtration of small samples. When this point is attained, the bay-coloured precipitate is separated by the filter, washed with cold water, removed from the filter, triturated in a mortar with water, and again placed upon the filter, and washed until the filtrates are neutral and free from impurities. In case the precipitate change its colour to dark or grey, it must be decomposed by sulphuretted hydrogen in water, and again treated with baryta and acetate of mercury. When the mercury-compound on washing retains a bay-colour, it is free from resin, calomel, and phenylic acid; and, on decomposition in water in a flask, in a current of sulphuretted hydrogen, will yield a yellow solution of pure urochrome, which, after the removal of the sulphuretted hydrogen by boiling in a current of hydrogen, cooling, and filtering, is clear and bright.

*Mode of obtaining Urochrome by means of Lead-salts directly from Urine.*

Prepared or limed urine is treated with neutral acetate of lead until an excess of it ceases to react. The precipitate is collected on a filter, and washed. The filtrate, without the washing water, is treated with basic acetate of lead until it ceases to react. The precipitate is filtered off. To the filtrate some ammonia is added, and the precipitate filtered off. Each of these precipitates is now separately treated as follows.

It is placed in a mortar, and triturated with dilute cold sulphuric acid, cautiously added, until a sample filtrate shows an excess of sulphuric acid when treated with baryta-solution and nitric acid. To the filtrate from the lead-sulphate, carbonate of baryta is added, to remove excess of sulphuric acid; and, after careful mixing without employment of heat, and some standing, during which the baryta salts settle well in the yellow fluid, the latter is separated by filtration. The filtrate is made alkaline

with baryta-water, treated with carbonic acid, and filtered again. It is now precipitated with acetate of mercury; and the urochrome-mercury is washed completely with cold and boiling water, until clean and neutral. It must remain of a bay-colour, and not become grey or dark. If it do so, it must again be decomposed by hydrothion, and the urochrome retransformed into lead-salt by precipitation with neutral acetate and ammonia; the precipitate, after washing, decomposing with sulphuric acid, treatment with baryta as described, and filtration, yields a fluid from which acetate of mercury precipitates pure urochrome-mercury.

The three lead-precipitates from urine by this treatment yield one and the same colouring matter. They need not, therefore, be treated separately, unless to do so offers a convenience or a satisfaction to the inquirer. The urine may be precipitated in one operation by neutral acetate of lead and ammonia, until colourless. The employment of hot urine and hot reagents condenses the bulky precipitate, and makes it more manageable. The employment of heat after precipitation has the same effect, but is less convenient. Large quantities of materials and large sized vessels and utensils are requisite to obtain a notable quantity of product.

*Prepared Urine and Corrosive Sublimate.*

To prepared urine a saturated solution of corrosive sublimate was added, until it ceased to produce any precipitate. The white deposit was isolated, washed on the filter, transferred into boiling water, again filtered, and then decomposed in spirit of wine by hydrothion. The yellow filtrate was allowed to stand for six days exposed to the air, to deposit sulphur; and, after a second filtration, tested.

Boiling did not change its yellow colour. The addition of hydrochloric acid made the colour dark. Nitrate of mercury produced a pale flesh-coloured precipitate, which became a little redder on boiling. The fluid, shortly after boiling, became turbid, and deposited a precipitate. (Reaction for urochrome.) Acetate of mercury caused a copious precipitate, entirely soluble in nitric acid, leaving a yellow solution. (Reaction for urochrome.)

Nitrate of silver caused a white copious deposit, which was not entirely soluble in nitric acid, but left some chloride of silver.

Acetate of lead caused a copious white precipitate, shrinking on boiling, and yielding chloride to the water. Acetate of lead and ammonia precipitated the whole of the colouring matter, leaving a colourless fluid.

Evaporation of the filtrate left a brown residue (decomposed urochrome, insoluble in water), and some soluble matters, amongst them chloride of ammonium.

The precipitate by sublimate in prepared urine, therefore, contained urochrome, hydrochloric acid, and ammonia, which passed into the alcoholic solution. With the sulphide of mercury, there remained uric acid and xanthine, and probably much urochrome.

The alcoholic solution was now treated with acetate of lead, and a little ammonia to alkalinity. The copious yellow precipitate was removed and washed; the filtrate was colourless. The precipitate was transferred from the filter to a mortar, and carefully mixed with dilute sulphuric acid, added in slight ex-



cess. When the sulphate of lead was settled, the yellow solution was filtered. This solution was now treated with carbonate of baryta until neutral and free from sulphuric acid, and, after standing, filtered. To the solution, acetate of mercury was added as long as a precipitate was produced. The mixture was heated, the precipitate well washed with water, boiled in water, and again washed. There remained a yellow or fawn-coloured compound of urochrome-mercury, which, after decomposition by hydrothion in little water, with a little spirit added, yielded a yellow solution of urochrome. Hydrothion was driven off by boiling. The solution then presented all the characters and tests of a solution of pure urochrome.

The urine filtered from the sublimate precipitate was of a paler colour, and rather greenish; on standing, it deposited grey flakes of a compound containing reduced mercury. When this reducing action was completed (probably due to phenylic and cresylic alcohol), the fluid was filtered again. It was now treated with acetate of lead and ammonia, which produced a yellow precipitate, leaving a colourless fluid. The washed lead-compound decomposed by sulphuric acid, treated with carbonate of baryta, as above described, and ultimately with acetate of mercury, yielded, after decomposition of the urochrome-mercury, a solution of pure urochrome.

The urine, before the application of the lead, had yielded the pink reaction with nitrate of mercury. The urochrome did not yield the pink reaction. Consequently, the pink reaction was due to a body remaining in the filtrate from the lead-compound. This filtrate was evaporated to a small bulk, and remained colourless almost to the last, when it assumed a slight amber tint. It did not yield the pink reaction with nitrate of mercury any longer. The body of which it was a sign had been volatilised.

#### *Urochrome from Extract of Urine boiled during many hours with Sulphuric Acid.*

Prepared extract of urine was treated with concentrated sulphuric acid, added drop by drop under agitation. The slight precipitate which formed (gypsum) was removed, and the fluid put into a retort on a sand-bath connected with a condenser. Distillation was now proceeded with, and carried on for six hours, the water being occasionally replaced, and more acid added, in the form of dilute sulphuric acid.

There remained in the retort a dark red fluid, mixed with flakes of resin and brown granular matter. The fluid was decanted and filtered, and, on standing, deposited crystals of hippuric acid. This circumstance showed that the action of the acid had been directed mostly against the urea and a portion of the urochrome, and that some urochrome might be undecomposed. The fluid was therefore evaporated on the water-bath until it filled with crystals of sulphate of ammonia, soda, and other matters. The mixture was extracted with spirits of 56 over proof, and the dark brown solution again evaporated, until it formed a second crystallisation. This was again extracted with spirit, and the spirit was driven off. A syrup remained, crystallising but sparingly. A third extraction left an uncrystallisable syrup.

This syrup, diluted with water, was treated with carbonate of baryta, and boiled until all sulphuric

acid was precipitated. It was next precipitated with acetate of lead in slight excess, a few drops of ammonia being added. A copious precipitate of urochrome-lead, with some carbonate and oxide of lead, ensued. This was washed and boiled in water, decomposed by sulphuric acid, the excess of acid removed by carbonate of baryta, and the solution of urochrome precipitated with acetate of mercury. The urochrome-mercury, purified by boiling in water, was suspended in water with a little spirit, and decomposed by hydrothion. After standing and filtering, a solution of urochrome was obtained, having all the properties of urochrome obtained from fresh urine and fresh extracts. The syrup, after boiling with baryta-carbonate, had a neutral reaction, contained baryta in solution, yielded an immediate copious precipitate of nitrate of urea with nitric acid, a slight precipitate with chloride of zinc and spirit, and a copious one with corrosive sublimate. This latter probably contains a product of decomposition of urochrome, and deserves further investigation. The distillate from the retort was acid, and had a fearful odour. It was neutralised with carbonate of soda, and evaporated to a smaller bulk. When it was perceived to evolve a strong urinous smell, the evaporation was interrupted. It was now extracted with repeated quantities of ether; the ether was evaporated or distilled off at a gentle heat in the water-bath, when an *essential oil* was obtained as a residue, which had a powerful odour, a yellowish colour, became milky on mixing with water; on being heated with nitrate of mercury, gave a splendid purple reaction, and did not change the solution of silver even on boiling. It consequently contained no phenylic or cresylic alcohol, and was evidently an oil of peculiar properties—the *smelling principle of urine*. In the sequel, it will be termed **THE VOLATILE OIL OF URINE**.

#### *Purification of Urochrome.*

However great the care may have been with which the mercury-compound (by acetate) of urochrome has been washed, the solution of the colouring matter obtained by decomposing the salt with sulphuretted hydrogen will always be found to contain some hydrochloric and acetic acids. The former can be entirely removed by shaking the solution with freshly prepared oxide of silver. But the silver combines with a great part of the urochrome, forming a bulky precipitate; while the urochrome which remains in solution also contains a considerable amount of acetate of silver in solution.

This solution is yellow, but much brighter than before treatment with silver oxide. It has an alkaline reaction, yields no precipitate with nitrate of silver, but a precipitate with nitrate of mercury (which becomes red on boiling, as does also the fluid in which it is suspended), and a precipitate with acetate of mercury. It is freed from silver by hydrothion, and the filtrate evaporated to dryness on the water-bath. Pure urochrome now remains, in the form of an uncrystallisable yellow solid matter.

#### *Physical and Chemical Properties.*

On evaporation of a pure and neutral solution of urochrome, it remains in the form of yellow crusts. They are, however, not entirely re-soluble in water.

It is easily soluble with a purely yellow colour in

water, least in alcohol,\* more in ether, very dilute mineral acids, and alkalis.

Its watery solution, on standing, even when precluded from contact with air, assumes a darker colour verging towards red, and becomes red at last. It next becomes turbid, and deposits flakes of resinous matter. This decomposition is effected more quickly by the agency of heat.

When a yellow, somewhat acid, watery solution of urochrome, such as can be obtained without the employment of oxide of silver, is evaporated in the open air on the water-bath, it becomes covered with a red film of resinous matter. The fluid, on cooling, becomes turbid; but ultimately is cleared up by the deposition of more resin, which was dissolved in the hot fluid.

The same acid watery solution, evaporated in a retort in a current of hydrogen, is decomposed. Resin is formed, which is dissolved in the acid liquid with a red colour; but falls down on cooling in the form of flakes. These under the microscope are seen to be composed of red non-crystalline granules. A highly acid, clear, colourless, stinking distillate, passes into the receiver. The ultimate residue in the retort is syrupy, and remains so when repeatedly treated with water to remove resin, and re-distilled in the hydrogen current.

Acids effect a similar transformation by mere contact, immediately by boiling. Hydrochloric acid immediately precipitates resin by boiling; but retains in solution much resin, of which the greater part is precipitated by the addition of water. Dilute nitric acid also effects this decomposition; but the solution cannot be concentrated, as can the hydrochloric acid solution. The hydrochloric acid solution, after evaporation of most acid and neutralisation of residue, does not yield the reaction for sugar with an alkaline solution of copper. Boiled with caustic potash and a little oxide of lead in solution, urochrome apparently undergoes no change; no sulphide of lead is deposited.

From its watery solution, urochrome is precipitated by nitrate of silver as a gelatinous mass, entirely soluble in nitric acid; neutral acetate of lead throws down a white and flaky precipitate; basic acetate of lead, a bay or yellow coloured flaky precipitate. Acetate of mercury produces a yellow fawn precipitate. Precipitation by this reagent is complete from neutral solutions. Nitrate of mercury produces a white precipitate; which, after boiling, becomes pale flesh-coloured; it is entirely soluble in nitric acid. The supernatant fluid assumes a pink colour.

#### *Decompositions. (Red Resin, Uropittine, Omicholic Acid.)*

When an acid watery solution of urochrome, or a mixture of urochrome and of a quantity of mineral acid, is boiled for a sufficient length of time, the fluid assumes a dark red or brown colour, and drops

of resin are seen in it. On the addition of water, or on cooling and standing, it deposits red or brown flocks, which can be worked into a lump by kneading with a glass rod, and removed. By repeating the boiling of the mother liquor, some more resin can be obtained; but the subsequent portions show already, by their black colour, that they are not so pure as the first portions.

When this resin is allowed to stand under water or kneaded with a glass rod, a brown powder separates from it, which is evidently mechanically mixed with it. (Uromelanine.) This powder also remains undissolved, when the resin is extracted with alcohol. Boiling alcohol dissolves a little of this brown powder, and deposits it again on cooling. If, therefore, the resin is dissolved in boiling alcohol and filtered hot, the solution has to be filtered a second time after standing for twenty-four hours.

The alcoholic solution of the resin thus obtained is of a magnificent ruby red colour. The addition of water causes at first an opacity in it; soon, however, the greater part of the resin is deposited in the form of reddish-brown flocks. If the alcoholic solution is evaporated to a high state of concentration and poured into cold water, the resin is deposited in a granular form. If the coloured liquid is now filtered off, and the granules are agitated in hot water, they again coalesce into the original soft red resin. On drying and standing, the resin becomes hard and brittle. In hot water, it becomes adhesive, like tar, and dissolves a little. It has a peculiar powerful smell, which is evidently the basis of the smell of castoreum. Heated on platinum, it fuses; and under boiling emits a powerful and disagreeable odour. It next burns with a strongly lighting flame, and is ultimately entirely consumed.

#### *Purification of Red Resin.*

The red resin was purified by fusing it repeatedly in hot water, until, on the addition of cold water, it became immediately hard and brittle. It was next dissolved in a small quantity of hot alcohol; and this solution, after filtration, thrown into a large quantity of cold water. The red powder which was deposited was washed in the filter, and dried *in vacuo* over sulphuric acid. [It was found to be a mixture of substances, which were separated as follows.

#### *Separation of Uropittine from Omicholic Acid.*

The dry resin was extracted with ether, as long as this agent dissolved anything. The ethereal solution contained all the omicholic acid; the residue, constituting the main bulk of the red resin originally employed, contained all the uropittine.

#### *Uropittine.*

When the residue, which was quite insoluble in ether, was boiled with absolute alcohol, it mostly dissolved, and, on cooling, deposited a brownish-yellow matter in crystalline granules. (The crystals are probably minute microscopic rhombic octohedra.) These granules, after repeated re-crystallisation from absolute alcohol, in which they were ultimately sparingly but entirely soluble, represented a pure well defined chemical body, to which, as being apparently of neutral properties, but having the main peculiarity of the red resin—namely, that of fusing by heat—the name of uropittine was given. It was subjected

\* After I had ascertained this peculiarity of urochrome, I ceased, of course, to employ any alcohol in its preparation. When, therefore, in the course of the above experiments precipitates of urochrome with metallic salts have been decomposed in alcohol or spirit of wine, I should now under the same circumstances employ water; the disadvantages of the higher boiling point of water, to which the solution must be exposed for the expulsion of sulphuretted hydrogen, notwithstanding. This slight solubility in alcohol of urochrome also explains in a measure the scanty success of former researches for its isolation; in almost all of them, alcohol was employed at one or other of the stages of the proceeding, and, instead of being extracted, the urochrome was left behind.



to elementary analysis, and yielded the following results.

*First Analysis.*

|   |                 |
|---|-----------------|
| The substance was dried under the air-pump. |                 |
| Taken for analysis .....                    | 0.2884 grammes. |
| Carbonic acid found .....                   | 0.5786 "        |
| Equal to 55.13 per cent. of carbon.         |                 |
| Water found .....                           | 0.1503 "        |
| Equal to 5.87 per cent. of hydrogen.        |                 |

*Second Analysis.*

|  |          |
|--|----------|
| Substance taken for analysis...              | 0.3520 " |
| Carbonic acid found.....                     | 0.7170 " |
| Equal to 55.46 per cent. of carbon.          |          |
| Water found .....                            | 0.1677 " |
| Corresponding to 5.28 per cent. of hydrogen. |          |

*Third Analysis: Determination of the Nitrogen.*

|  |                   |
|--|-------------------|
| Substance taken .....  | 0.3157 "          |
| Combustion-tube, before and after combustion, cleared by means of carbonic acid gas current. |                   |
| Volume of the nitrogen gas obtained .....  | 32.5 cub. centim. |
| Temperature .....  | 15° centigrade    |
| Barometer, 30.08 inches = 764.03 millimètres.  |                   |
| Quantity of nitrogen, by weight .....  | 0.0382 grammes.   |
| Equal to 12.10 per cent. of the substance taken.   |                   |

At the beginning of the combustion, the glass-tube broke, and the mixture of substance and oxide of copper, traces of the uropittine being perhaps already decomposed, had to be transferred into another glass tube, in which the analysis was completed. A portion of the nitrogen may, therefore, have been lost.

The above elementary analyses lead to the formula  $C^{18}H^{10}N^2O^6$  as representing the composition of uropittine.

|   |       | $C^{18}H^{10}N^2O^6$ |       |             |  |
|---|-------|----------------------|-------|-------------|--|
|   |       | Found.               |       | Calculated. |  |
| C | 55.13 | 55.46                | —     | 55.67       |  |
| H | 5.87  | 5.28                 | —     | 5.15        |  |
| N | —     | —                    | 12.10 | 14.43       |  |
| O | —     | —                    | —     | 24.74       |  |
|   |       |                      |       | 99.99       |  |

The above formula for uropittine may be considered as hippuric acid, in which one equivalent of hydrogen is replaced by amide ( $NH^2$ ).

Hippuric acid,  $C^{18}H^{10}NO^6$

Uropittine,  $C^{18}H^8(NH^2)NO^6 = C^{18}H^{10}N^2O^6$

The true hippur-amide being known, and not corresponding in its properties with uropittine, we have to consider the latter body only as isomeric with hippur-amide.

*Omicholic Acid.*

The ethereal solution of this body, as obtained by extraction from the mixture of substances termed red resin, is of a bright port-wine red colour, and a peculiar, independently of the ether, penetrating odour. On spontaneous evaporation of the ether, the acid remains as a syrup; ultimately, as a resinous hard residue, in the body of which no crystallisation is to be perceived. It is easily soluble in absolute alcohol; and this solution, when poured in water, deposits nearly the whole of the acid as a flaky red precipitate.

When its ethereal solution is allowed to evaporate spontaneously, a few needle-shaped crystals are deposited at the highest points reached by the ether. They are probably another body, and not omicholic

acid (possibly benzoic acid; the resin from putrid urine always contains some benzoic acid.)

The quantity of this acid was so small, that no analysis or other experiments could be advantageously undertaken with it.\*]

*Black or Brown Matter—Uromelanine.*

The matter which remains undissolved when the red resin is dissolved in alcohol, is washed repeatedly with alcohol, dissolved in caustic potash, precipitated by acetic acid, and again washed with alcohol. A powder is thus obtained; which may be black, or brown, or even have a violet tinge, according to its state of subdivision.

It is soluble in acetic acid, more in hot than in cold; and from this solution, nitrate of mercury precipitates a red matter.

On dry distillation, it gives out white fumes, which condense to an oil; but no sublimate of any kind is obtained. The fumes, or oil, are neutral, bleaching, rather than changing like acid or alkali, the colour of litmus. They give no aniline reaction. But, with nitrate of mercury, they give an exquisite red reaction and precipitate. A very bulky, dense charcoal of the bulk of the original particles remains.

Nitric acid dissolves the matter without effervescence. After evaporation, two matters are left—one soluble in alcohol, the other insoluble. The solution gives the red reaction with nitrate of mercury.

Concentrated fuming sulphuric acid easily dissolves the black matter, forming a red or purple solution. Immediate addition of water precipitates all coloured matter, and the liquid is white and clear. But when the concentrated mixture is allowed to stand overnight, water precipitates a coloured portion, another coloured portion remaining dissolved. Carbonate of baryta precipitates all coloured matter on boiling, and the filtrate is again white. Consequently, the baryta-salt of the sulpho-acid is insoluble in water.

[The recently precipitated body, well washed, suspended in water, and subjected to the action of chlorine, yields a brownish substance, soluble in boiling alcohol. While the spirit is being heated, some of the substance melts to a brown resin, which dissolves by continued heating with new alcohol. The solutions, added together, yield, on cooling, yellowish-red amorphous flakes. These flakes are not again entirely soluble in alcohol, probably because the chloro-compound undergoes a change during the heating with the alcohol. This supposition was further confirmed by the results of an elementary analysis of the chloro-compound.

*Elementary Composition of Uromelanine.*

*First Analysis.*

|   |                |
|---|----------------|
| Substance taken for combustion .....              | 0.2862 grammes |
| Carbonic acid obtained.....                       | 0.5985 "       |
| Representing 0.1632 carbon, or 57.02 per cent.    |                |
| Water obtained .....                              | 0.1452 "       |
| Corresponding to 0.0160 hydrogen, or 5.59 per ct. |                |

*Second Analysis: Nitrogen Determination.*

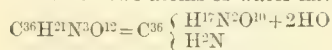
|   |                   |
|---|-------------------|
| Substance taken .....                         | 0.2765 "          |
| Volume of nitrogen obtained...                | 30.0 cub. centim. |
| Temperature .....                             | 175° centigrade.  |
| Barometer, 30.16 inches = 766.06 millimètres. |                   |
| Weight of nitrogen obtained...                | 0.03501 grammes   |
| Equal to 12.66 per cent.                      |                   |

\* The brackets denote passages which have been added by the author since the prize was awarded.

These analyses yield the formula  $C^{12}H^7NO^4$ .

|         | Found.      | Calculated. |
|---------|-------------|-------------|
| C ..... | 57.02 ..... | 57.6        |
| H ..... | 5.59 .....  | 5.5         |
| N ..... | 12.60 ..... | 11.2        |

The endeavour to control these analyses by repetition, and to determine the equivalent of uromelanine, had to be deferred on account of the necessity of printing the Essay. It is probable that the formula above given may have to be multiplied. Uromelanine presents a certain analogy to the green colouring matter of bile, cholochoine, the composition of which, according to my latest analysis, is  $C^{36}H^{18}N^2O^{10}$ . If the formula of uromelanine be trebled thus:  $3(C^{12}H^7NO^4) = C^{36}H^{21}N^3O^{12}$ —a formula is obtained, which may be considered as cholochoine, in which one atom of hydrogen is replaced by amide ( $NH^2$ ), and to which two atoms of water have been added.



The formula and properties of uromelanine differ so widely from those of indigo-blue ( $C^{16}H^3NO^2$ ), as to require no further comment.]

*Mode of Obtaining Uropittine and Uromelanine from Urine directly.*

The mixture of resin and black matter can be obtained from urine in the following manner.

(a) *From Fresh Urine.* A quantity of prepared extract of urine is put into a capacious beaker, and mixed with concentrated sulphuric acid, added, drop by drop, while the fluid is being agitated. A trace of xanthine [a little uromelanine, and much gypsum, are] precipitated in flocks. After filtration, the fluid is diluted with water, and distilled in a capacious retort. When the fluid has been reduced to one-half, the black resin will be seen adhering to the sides of the glass, and to the platinum which it is well to put into the retort to prevent bumping. The boiling is now interrupted, and the fluid allowed to cool. Fluid and resin are separated by decantation or filtration. The particles of resin are united by fusion in hot water. They are then washed, dried, and the resin is extracted from the black matter by solution in alcohol.

(b) *From Putrid Urine.* Putrid urine is treated with a little lime in powder, or saw-dust, and filtered. The dark brown filtrate is evaporated in an open dish over the free fire. Although it soon assumes a strongly acid reaction, nothing but ammonia passes away. All froth which rises during the evaporation is carefully skimmed off. When black particles begin to appear on the surface, it is allowed to cool, filtered, put into a retort, mixed with dilute sulphuric acid, and distilled. A mixture of hydrochloric, benzoic, acetic, and another acid, passes over, together with a stinking matter, which deposits in flakes when the distillate is left to stand. The residue in the retort soon deposits the resin as a soft tar on the surface of the fluid, the sides of the vessel, and the platinum, put into the fluid for safe boiling. The resin is separated mechanically and by the filter, washed, and separated into its constituents by alcohol. The uropittine and uromelanine thus obtained present the same essential properties as those obtained from fresh urine.

The mixed resin obtained from putrid urine has some peculiarities by which it is distinguished from the resin obtained from fresh urine.

It has the smell of asphaltum when fresh, mixed with that of castoreum. Its taste is slightly bitter, and highly nauseous. It does not dissolve in the saliva to any great extent.

The black matter, after separation from the resin by alcohol, and purification by precipitation from potash, falls down as a bulky deposit, but shrinks on drying. It ultimately becomes hard, black, and shining, and breaks like asphalt. It differs, therefore, in its physical appearance, from the uromelanine obtained from fresh urine.

The resin, or uropittine, from putrid urine, is also peculiar in this, that it is much darker than the resin from fresh urine, and contains some benzoic acid, which is never present in the resin from fresh urine. From this it can be separated by precipitating its alkaline solution by acid in hot water; collecting the resin, by kneading; and decanting the liquor, which contains the benzoic acid and some resin in solution.

RESULTS AND THESES.

1. The colouring matter of the urine, to which the name of urochrome is given, is one of the most interesting compounds in the list of organic and physiological substances.

2. It can be isolated in a pure state; and then is yellow, easily soluble in water, less in ether, and least in alcohol.

3. When its quantity [in equal bulks of solution] is increased, its colour still remains purely yellow. Consequently, the hypothesis of Vogel, that the urine of healthy and sick persons becomes darker in proportion to the increase of colouring matter, is fallacious.

4. Under various processes of decomposition, urochrome yields a red resin, consisting mainly of uropittine [having the elementary composition  $C^{18}H^{10}N^2O^6$ , and of omicholic acid, mixed with small quantities of undetermined matters], black matter, uromelanine [having the elementary composition  $C^{36}H^{21}N^3O^{12}$ ], and other products.

5. By a simple process, probably of oxidation, urochrome passes into a red colouring matter, ueruthrine, which [sometimes] colours red the urine of disease, and any deposits of urates contained in it. Frequently, this oxidation is only effected after emission. The red colour may also be due to omicholic acid, which is a little soluble in ammoniacal salts.

6. The fœtor of decomposed acid or alkaline urine is due to the uropittine and omicholic acid, and substances derived from them. It may be increased by, but is not primarily due to, carbonate of ammonia.

7. The urine of man contains an essential oil, which is volatile; has a strong peculiar odour; a violent reaction with iron chloride; and yields a diagnostic pink reaction with nitrate of mercury on boiling.\*

8. Human urine also contains cresylic alcohol, which is obtained, along with urochrome, by one of the processes for its isolation.

9. One of the principal features of uræmia is the retention in the blood of urochrome. It is there de-

\* This reaction is always obtained at the end of Liebig's quantitative analysis for urea, and has excited the curiosity of almost every napper who used that method. I have successfully used the appearance of the first trace of pink after the disappearance of all greenish yellow colour, as the sign that all urea was precipitated and excess of mercury solution present. The soda-test always confirmed the conclusion derived from the pink colour.



composed, and yields uropittine and omicholic acid, which, circulating in the blood, vitiates all tissues, can be found in the crusts on the teeth, and their smell can be perceived in the breath and the perspiration.

10. When colouring matter is retained, the typhoid symptoms of uræmia are prominent. The treatment with acids, under those circumstances, has to be set aside, as promoting the retention of the poisonous uropittine and omicholic acid, and a treatment with alkalis has to be substituted. The skin must be purified by washing, and repeated perspiration induced, until the effluvia do not any longer smell of uropittine.

[11. From healthy human urine, neither indican, nor uroanthine, nor any other substance yielding by decomposition with acids indigo-red and indigo-blue, can be extracted; neither does it yield indigo-red or indigo-blue by boiling with acids.]

12. Urochrome has no immediately apparent relation to the colouring matters of the blood or the bile. It is a derivate of albuminous matter, and the most essentially characterising ingredient of urine.

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### LIVERPOOL NORTHERN HOSPITAL.

TWO CASES OF AMPUTATION AT THE SHOULDER-JOINT.

By HENRY LOWNDES, Esq., Junior Surgeon to the Hospital.

CASE 1. William Myers, aged 36, a carter, was admitted into the Northern Hospital on June 16th, 1864, at 8 P.M., with the following injuries, inflicted by a horse. The right humerus was fractured in the upper third; there was a deep lacerated wound in the front, and another still more extensive in the back of the arm; and the hand could be passed freely through them both down to the fracture and up towards the axilla, where the end of the lower fragment lay. The pulse could be felt at the wrist; the elbow was much contused; the bone was not much comminuted, but one or two small loose pieces could be felt. There was a large contusion over the right scapula and the right side of the chest. The right side of the chest was a good deal collapsed. He said he had been tacked in the stable by an entire horse of which he was in charge. It appears to have first seized him by the neck with its teeth, and then to have got him down, and kicked him. The soft parts of the arm were so much injured, that my colleague, Mr. Hakes, agreed with me that amputation was necessary; and at 10 P.M., I removed the limb at the shoulder-joint. Mr. Hakes was able to compress the axillary artery very securely, by passing a finger into one of the lacerations. I was barely able to save sound skin enough to cover the wound. The brachial and two other vessels were tied with ligatures, and a vein that was troublesome was secured with an acupuncture needle and wire. He was directed to have brandy freely given through the night. He had thirty drops of laudanum on admission.

June 17th, 11 A.M. He was heavy and had slept a good deal; his breathing was much oppressed, and mucous râles were heard in the trachea and bronchi. The pupils were contracted. Emphysema had appeared on the right side of the chest, and extended upwards on the neck. Pulse 120; tongue dry and furred. He was ordered to have a strengthening plaster applied over the right side of the chest from the sternum to the spine.

R Ammoniac carbon. ʒj; spiritus atheris sulph. comp. ʒij; aqua ad ʒviiij. M. Sumat ʒss alternis horis.

He was ordered to have an ounce of brandy every two hours; also, ice and lemonade. He had passed urine; had been rather delirious.

9 P.M. He was much the same, but not delirious.

June 18th, noon. The emphysema had extended to the left side. His breathing was still much oppressed; tongue moist; pulse 120.

June 19th, 12.30 P.M. I dressed the stump, which looked well; there was a free discharge of serum. Wet lint was applied. He was ordered to have an enema of castor oil. At 5 P.M., he was seized with a violent pain on the right side, with great distress in breathing; pulse 134; respiration 56. Hot fomentations were ordered, and brandy every hour. At 9 P.M., the pain was a good deal less severe; pulse 120, sharp and hard; the face was flushed; the skin was hot; the bowels had been moved. He was directed to take a grain of powdered opium every four hours; to continue the brandy every two hours; to take beef-tea in small quantities frequently; to have turpentine applied to the side, and the stump poulticed.

June 20th, noon. He was decidedly better; pulse 108; respiration, 40; tongue much furred; skin cooler and moist. The stump was rather inflamed. He had slept a little. 9 P.M. He was still improving; and had taken a little bread and milk.

June 21st. Pulse 108, rather weak; tongue dry and brown. His breathing was still oppressed. A friction-sound was distinctly audible on the right side. The face was congested; the neck still rather emphysematous. He had slight delirium. The stump was suppurating freely, but sloughy in parts. He was ordered to omit the opium, and continue the ammonia and ether. A small blister was applied over the seat of pain; and half a grain of muriate of morphia was given at bedtime.

June 22nd. Respirations 44; pulse 120. He had slight delirium. The skin was hot; the tongue brown and dry. He had not slept well. An ounce of brandy was ordered to be given every hour.

June 23rd, 11 A.M. Pulse 132; respirations 32. He had slept better. There was great discharge from the stump. His respiration was very easy and natural; appetite better. In the evening, he seemed still a little better; but, about 3 A.M. on the 24th, the stump began to bleed; and, before this was found out, a very great quantity of blood was lost, and the patient died about a quarter of an hour after the house-surgeon had reached him.

CAPOST MORTEM EXAMINATION, thirty hours after death. (From notes by Dr. Roberts, Junior House-Surgeon.) The stump was very sloughy. The axillary artery was found firmly ligatured and appeared quite healthy; it contained a firm clot, partially decolorised and undergoing organisation; the inner coat of the artery was tinged with the absorbed colouring matter. The exact source of the bleeding was not determined; but it came from the neighbourhood of the posterior circumflex artery, which lay in a mass of bloody slough. There was fracture of the third, fourth, fifth, and sixth ribs, on the right side. The broken ends of the fifth projected inwards, and

had punctured the lung. There was bright uniform and capillary redness of the costal pleura about the seat of fracture; some effusion of lymph, principally on the pulmonary pleura; about an ounce and a half of yellow fluid in the pleural cavity. There was no inflammation of the lung-substance, except at the seat of puncture. There was emphysema of the cellular tissue of the mediastinum.

REMARKS. The severe injuries to the chest sufficiently account for the collapsed state of the patient on admission. Although I had used acupressure in the three last amputations I had had, I did not try it in this case, partly because of the scanty and unsound flaps that were left, and partly because I thought the ligatures could be applied more rapidly, and I feared any loss of blood in the patient's state. The chest-symptoms had abated, and I was beginning to have good hopes of his recovery, when the hæmorrhage carried him off.

CASE II. Francis Riley, aged 4, was admitted into the hospital on June 22nd, 1864, with the right arm crushed by the wheel of a lorry. It was completely shattered quite up to the shoulder-joint; and there was only just skin enough left to form a covering after amputation. This flap of skin was pretty sound; but was a good deal detached from the muscles under it, which were much injured. The face and forehead were contused and swollen; and there was a severe contusion of the right thigh. At 8 P.M., chloroform was given, and I removed the limb at the joint, making the flaps entirely of skin. Acupressure was used; and the axillary artery was secured by a long needle passed through the integuments, and a tape passed over its ends. Three smaller vessels were secured by small needles on the face of the wound, with looped wires passed over their points and twisted round their shafts. The flaps were brought together with sutures. A drachm of brandy every two hours was given.

June 23rd, 10 A.M. He was going on well; had slept a little; breathing rather oppressed. 7 P.M. I found him labouring under general convulsions, which had seized him about 5 P.M., and had continued with very little intermission. His face was swollen and flushed. As the stump looked rather tense, I removed the sutures, and also the three small needles, and took off the tape from the large one. Five minims of laudanum were given; and in an hour's time, as the convulsions had not ceased, three minims more.

June 24th. He had dozed a good deal in the night; he was free from convulsions, but was unconscious, and had not spoken. He was ordered to have milk and lemonade, and four minims of laudanum at bedtime.

June 25th. He had a restless night; was quite conscious; pulse 160, very small and weak. The outer angle of the stump was rather sloughy. The contused portion of the thigh was sloughing; and a piece of dead fascia that seemed very tense was slit up. The draught was ordered to be repeated every night; and a drachm of wine to be taken every half-hour. At 12.15 P.M., about sixty-four hours after its insertion, the long needle was removed.

June 26th. Pulse 148; tongue white; breathing oppressed.

June 27th. He had had a little magnesia, which has operated, and he was better. Pulse 140.

June 28th. He had slept well. The stump was nearly clean. Pulse 140.

June 29th. He was much improved; pulse 124; tongue clean and moist. He could take more food.

From this time, he went on well. A small granulating surface was left, which was difficult to heal, as underneath it lay the edges of the glenoid cavity continually moving about. One or two abscesses formed

in the neighbourhood; but he became plump and well, and was discharged on September 18th, 1864, well, with the exception of a slight sinus still discharging a little.

REMARKS. One point of interest in this case was the severe attack of convulsions. I was not sure whether it arose from the injury to the head, or from the loss of blood and exhaustion, or from the irritation about the stump. The fact of the convulsions being aggravated by handling the stump seemed to favour the latter view; and the removal of all tension and points of irritation, together with the use of opium, seemed beneficial.

With regard to acupressure, I may say that I have used it in five cases, all in the present year. In one, an amputation of the thigh high up, for severe injuries and hæmorrhage, the patient died from shock within a few hours. The other cases were, an amputation of the thigh in the middle third, secondary; of the leg, secondary; at the wrist-joint, primary; and at the shoulder-joint, primary (the case just related). All these made good recoveries. In one other amputation of the leg, I could not succeed in securing the vessels with the needles, and was obliged to have recourse to the ligature.

In general, I have not found the use of the needles difficult. I have seen no hæmorrhage follow their removal; and trust that, by using them in suitable cases, we shall help to lessen the mortality after amputations.

## Transactions of Branches.

### SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

ABSTRACT OF A PAPER, ON THE DIFFERENCE IN THE SUSCEPTIBILITY OF JOINTS.

By JAMES V. BELL, M.D., Rochester.

[Read at Rochester, Sept. 30, 1864.]

THE author pointed out the difficulty of foreseeing the amount of mischief that may ensue upon any injury of joint, in consequence of difference in the susceptibility of joints. This difference is due to the following causes: *a*, anatomical and physiological; *b*, diathetic; *c*, morbid state of system present at the period of injury; *d*, accidental.

The author recommended the removal of dead portions of bone from the cavity of joints, in the place of excision, in selected cases, and at a medium period; viz., neither too hastily nor too tardily.

Dr. Bell narrated the heads of several cases.

CASE I. A publican sustained a compound comminuted fracture of the patella by a fall from a cart. The recovery was perfect. The treatment consisted in the application of twelve leeches within the first twenty-four hours; and in the use of tartarated antimony, digitalis, and opium, for a fortnight, and of iodide of potassium subsequently.

CASE II. A man met with compound comminuted fracture of the olecranon. Unhealthy inflammation of the soft parts supervened on the fourth day; the joint became disorganised; pyæmia occurred; and death was the result.

CASE III. A man received a lacerated wound of the knee-joint without injury of the bones. Traumatic delirium set in on the fifth day; and death occurred about the tenth day.

CASE IV was that of a youth, whose knee-joint was twice injected with iodine without the supervention of much local inflammation or general disturbance.



# Progress of Medical Science.

## MEDICINE.

**BULIMIC AND SYNCOPAL DYSPESIAE.** The *Bulletin Général de Thérapeutique* for August 15th gives, under this title, an extract from a work by Dr. Guipon, to which the Civrioux prize has been awarded by the Academy of Medicine.

*Bulimic Dyspepsia* has been several times met with by Dr. Guipon, independently of any other affection than nervous gastric disturbance. Its essential character is not only an exaggeration of the appetite, but also an actual increase of the digestive power. Normal digestion supplies the wants of the economy, and imparts a feeling of being satisfied; in bulimia, on the other hand, although digestion takes place regularly, the sensation of appeased want is not felt, or is only transient. Bulimia, in its simple form, is in fact a disease characterised by excess and exaggeration of function; and is the converse of atonic dyspepsia, where the digestive power is lessened. Bulimia may, however, be accompanied by other dyspeptic symptoms, such as pain, acidity, or pyrosis; these are relieved by taking food, but reappear when the digestive process—rapidly performed—is completed. Dr. Guipon has met with the disorder in both the acute and the chronic form. The latter is much the more obstinate and strongly marked; and of it he gives the following description.

The patients complain that they are dying of hunger; that they constantly require to take food for their nourishment. It is in vain that they multiply their repasts, and take meat six, eight, or even fifteen times in the day; they are always in the state of persons suffering from excessive hunger and inanition; they feel fatigued and languid, are much depressed, and their intellectual faculties are weakened. Sleep even does not interrupt the morbid hunger; to obtain rest, the patients are obliged to take food several times during the night.

For the treatment of bulimia in the acute form, or in the chronic form when not of long standing, medicine possesses means of more or less efficacy. In inveterate cases, the medical art is less successful. Bulimia, when temporary, is almost always connected with some general disturbance, especially hysteria; and hence the remedies which act on the nervous system generally will influence the digestion. Antispasmodics, sedatives, emollient or calumative baths, will be the remedies that will present the greatest chance of success, when used in combination with suitable hygienic regulations. In the chronic form of more or less duration, therapeutic means have in most cases only relatively advantageous results. Opium and its preparations retard digestion and the solicitations of the appetite; but, like all palliatives, they soon fail in producing this effect, or give rise to symptoms which necessitate the suspension of their employment. It is the same with the various narcotics, applied internally or externally; with nitrate of bismuth, arsenic, iodine, etc. The remedy which has seemed to M. Guipon to succeed best, has been raw meat, minced. In a very obstinate case, by means of this, he succeeded in procuring more lasting relief than had been afforded by a host of medicinal substances variously combined. The failure of strength, which is always so great and remarkable in bulimic patients, notwithstanding that a state of *embonpoint* is often very perceptible, is scarcely relieved by tonics. This condition has always appeared to Dr. Guipon to be in proportion to the over-activity of the di-

gestion; so that, in fact, the less bulimic patients eat, the better condition they are in. With this increasing weakness and feeling of exhaustion, it naturally follows that the patient becomes discouraged. As a prophylactic measure, less copious and less frequent meals would be proper; but how can patients be expected to submit, who are constantly tormented by hunger, and obtain relief only by satisfying it? The advice to lessen the food is easy in theory, but almost impossible in application. The use of large quantities of wine has not appeared to Dr. Guipon to produce any appreciable result.

*Syncopal Dyspepsia* was admitted as a variety of dyspepsia by Sauvage, but has since been rejected. Dr. Guipon observes, however, that the occurrence of syncope during digestion does not indeed constitute dyspepsia; but that, when difficult digestion, attended with more or less pain, and without flatulence, is frequently accompanied by syncope, this characteristic symptom is at least sufficient to entitle the disease to be considered as a special form. Feeble, impressionable, anæmic females, in a state of pregnancy, are the most predisposed to the disease. The digestive function, slowly and painfully performed, appears to absorb all the powers of the economy; there is a feeling of fatigue, the circulation becomes slow, and the harmony of the functions is broken; the pulse becomes weak, the respiration is lowered, the eyelids cannot be raised, sensation is diminished or lost, and the extremities become cold. This state is sometimes of equal duration with the digestive process. If the patient is or wishes to remain in a state of rest, the circulation, and sometimes the respiration, are entirely interrupted, and true syncope is produced. The patient either remains sitting, or, what is less dangerous, falls on the floor, and gradually recovers; remaining, however, plunged during several hours in a kind of syncopal torpor. Dr. Guipon distinguishes three varieties of the disease: the simple form, which has just been described; the gastralgic, which is accompanied by more or less severe pain in the stomach; and the syncopal dyspepsia of pregnant females. The occurrence of the last named form is accounted for by the frequent diminution of the blood-corpuscles in the first half of pregnancy, in connection with the marked nervous susceptibility and disturbance of the digestive function which attend this condition.

The treatment of syncopal dyspepsia must generally be that of general atony—of chloro-anæmia. Tonic ferruginous medicines must be continued until the symptoms have disappeared. The digestive function itself, being the occasional cause of syncope, should be lightened as much as possible; and for this purpose, the meals should be multiplied, and consist only of light and easily digestible food; such as soups, meat-jellies, hashed meat, soft boiled eggs, chocolate, etc. During meals, all excitement and exertion, and fatiguing position, must be avoided; and, during digestion, any tight articles of clothing must be loosened. Parties, where there is excitement and more or less vitiated air, and prolonged meals, must be carefully avoided. If the disease continue in spite of these precautions, the horizontal position must be assumed after each meal, and a sinapism applied to the epigastrium. If the syncopal state persist, ordinary remedies must be employed; such as ether, friction of the temples with strong vinegar, inhalation of ammonia, and sinapisms. When the disease is accompanied with hysteria, antispasmodics, given either with iron, or in enema, an hour before each meal, will aid in preventing the attack. Finally, an attentive study of the proximate causes of the syncope will often shew what is produced by difficult digestion of certain articles of food. These, then, are to be abstained from if of little importance; but, if otherwise,

proper remedies must be administered, among which tonics, sedatives, pepsine, and alkalies, will always hold the foremost place.

**POISONING BY EATING TOBACCO.** Dr. J. Le Briert was called in February last to see a woman, aged 46. She was much emaciated; but her health had been very good. She had been married twice, and had had five children. For some time she had had mental trouble; and, four years ago, a daughter eleven years old, to whom she was much attached, died of typhoid fever. From this time she became addicted to alcoholic drinks, and adopted the habit of eating tobacco in all forms, using it each week to the value of about two francs. When Dr. Le Briert saw her, she was nearly voiceless; she could only utter with difficulty a few confused sounds. Respiration was difficult and sighing; the pulse weak and slow. The heart scarcely beat. The pupils were dilated, and insensible to light; the eyes were haggard; she was almost blind. There was not complete deafness, but hearing was very sluggish. The face was pale, emaciated, and heavy; the tongue trembling, red, and dry. The patient had very painful dyspepsia. The abdomen was retracted. She had had no evacuations for a considerable time without the help of clysters or purgatives; at first, however, she had had diarrhoea and vomiting. She passed her urine involuntarily; had cold perspirations, and could not sleep. Nothing could be done in this case, but to prescribe soup, coffee, and acidulated drinks. On the next day, the patient's voice resembled that of a choleraic person; deglutition was impossible. The chest was expanded with difficulty; the inspiratory murmur and the movements of the heart were almost imperceptible. She died in the course of a few hours. (*Gaz. des Hôpitaux*, 21 Juillet 1864.)

#### ANATOMY, PHYSIOLOGY, & PATHOLOGY.

**ANEURISM OF THE CÆLIAC AXIS.** Dr. Luigi Concato relates the following case. A man, aged 38, who had been ailing for several years, while working in the environs of Bologna, on November 11th, 1861, was seized with extreme prostration, and pain in the stomach radiating to the lumbar region. The medical man who was called to him detected a pulsating tumour in the epigastrium. On his admission into hospital, on November 18th, palpation, percussion, and auscultation of the chest gave negative results, with the exception of slight exaggeration of the second sound at the origin of the aorta. The pulse was from 70 to 80, intermittent. In the epigastric region was a projecting tumour, which became insensibly confounded with the neighbouring parts; there was no change of colour in the skin. The tumour was about three inches in diameter, and nine-and-a-half in circumference. There were heard over it a murmur synchronous with the arterial diastole, and also one coincident with the respiratory movements.

The patient died suddenly on March 7th, 1862. On *post mortem* examination, the heart was found to be slightly enlarged; the walls of the left ventricle were hypertrophied. The pulmonary artery and the aorta were dilated; the semilunar valves of the latter were thinned; its internal surface was of a deep yellow colour, had lost its smoothness, and was scattered with yellowish white patches. The abdominal cavity, on the left side, contained coagulated dark blood: this being removed, the epiploon was found partly covered by the stomach, partly extending beyond its lesser curvature, and raised by a large clot: it covered a hemispherical tumour as large as the head of a six months' fetus, consistent in its upper part, but soft

and fluctuating inferiorly. This tumour extended backwards as far as the lumbar vertebrae, to which it was adherent by loose connective tissue. Above and to the right of the upper half was an irregular opening of about the size of a franc: by introducing the finger into this opening, a very friable mass, feebly adherent, was removed. On looking into the cavity through the opening, there was seen in the posterior part an elliptical aperture with smooth edges, communicating with the anterior part of the aorta. The calibre of this vessel was normal both above and below, and at the level of the tumour, to which it was adherent. The renal and mesenteric arteries were normal. The cœliac axis was replaced by the tumour which has been described. The splenic and hepatic arteries could be recognised immediately above the median circumference and at the anterior part of the tumour; the coronary artery of the stomach could not be found. The aorta was quite healthy. (*Annali Univ. di Medicina*, and *Gazette Méd. de Paris*, 2 Juillet 1864.)

**LESIONS OF NUTRITION CONSECUTIVE ON HEMIPLEGIA OF OLD STANDING.** A woman, aged 79, under the care of M. Charcot, died in the Salpêtrière, having been hemiplegic during three years. The paralysis appeared suddenly, but was not attended with loss of consciousness; the left arm was affected, and speech was lost; there was also facial paralysis on the same side. Some hours afterwards, the left leg was paralysed. Motion alone was impaired; sensation was even exalted, and the patient sometimes complained of pain in the left side. The left forearm was warmer and more coloured than the right, and its integument was scaly.

On *post mortem* examination, there was found a patch of yellow softening, occupying some of the convolutions at the anterior part of the brain. The deeper parts of the encephalon presented no change. The nerves of the paralysed side were notably enlarged, from the deposit of connective tissue between the nerve-tubes. The muscles of the same side were atrophied, friable, of a reddish-yellow colour; and under the microscope presented granular deposit of fat in the fibres, from which the transverse striæ had disappeared. There was also an increased number of nuclei in the sarcolemma, and a large number of embryo-plastic nuclei between the fibres. The joints of the affected side presented the appearances ascribed by M. Teissier to prolonged immobility: softening, loss of polish in the cartilages, and hyperæmia of the synovial membrane. The extremities of the bones were also much thinned, and the thickness of the compact tissue was much less than on the other side. The medulla of the bones had undergone senile fatty transformation on both sides, and was on the left side the seat of more or less extensive ecchymoses. (*Gaz. Méd. de Paris*, 9 Juillet 1864.)

**EPITHELIAL TUMOURS OF NERVES.** M. Cornil states that, in patients who have epithelial tumours, the nerves frequently become similarly affected, either from being contiguous to the morbid tissue, or at a distance from the part primarily affected. These neuromata present for consideration the lesions of the envelopes of the nerves, and of the nerve-tubes. The lesions of the cellular envelope of the nerves which M. Cornil has found, are of two kinds. In one, there is a hard semi-transparent tumour, yielding little fluid on pressure, and formed of a tissue of closely set alveoli, which contain small sound cells or nuclei. The other consists of neuromata of less firm consistence, yielding on section an abundance of thick fluid, which flows from alveoli visible to the naked eye, with vascular papillæ on their inner surface. In this form of the disease the epithelial cells are large, flattened,



and prismatic or many-sided, with several prolongations. Of the nerve-tubes, a small number are diseased; in these the medullary substance is granular, and is transformed into fatty molecules, which are sometimes united into a granular mass. This change in the nerve-tubes, which extends into the entire peripheric end of the nerve, produces very severe continuous pain, sometimes attended with exacerbations which, in certain uterine tumours, constitute the chief characteristic symptom. (*Journal de l'Anat. et Phys.*, and *Gaz. Méd. de Paris*, 6 Août, 1864.)

**ORGANIC LESION OF THE NERVOUS CENTRES IN GENERAL PARALYSIS.** M. Joire has described as a lesion invariably attending the general paralysis of the insane, the development, on the anterior and inferior surface of the fourth ventricle, of small mammillated projections or granulations, resembling the *cutis anserina*. The appearance is marked in proportion to the duration of the disease. In patients who die at an early stage, the granulations are numerous, very small, and appear like scattered grains of sand. In cases of long standing, the projections are large, whitish or transparent, and of a sufficiently firm consistence to feel like rugosities. They attain their greatest development at the lower part of the floor of the fourth ventricle, at the level of the point of divergence of the restiform bodies. The lesion is generally attended by more or less considerable dropsy of the ventricles and meninges. It is sometimes accompanied by softening of the superficial layer of cerebral substance in which it is seated; this layer has then a gelatinous semitransparent appearance, and is easily raised by the handle of the scalpel. In five or six cases, M. Joire has found similar granulations, generally very small and numerous, in the parts forming the floor of the lateral ventricle. (*Bulletin Méd. du Nord*, and *Gaz. Méd. de Paris*, 27 Août, 1864.)

**INFLUENCE OF THE PNEUMOGASTRIC NERVES ON THE SUBMAXILLARY GLANDS.** M. Oehl finds that, by applying the galvanic current to the pneumogastric nerves, or to their central end, if divided, an increased secretion is produced from the submaxillary glands—the increase being greatest on the side on which the stimulus is applied. The augmentation appears to be independent of the sympathetic; for, while the secretion produced by irritating the pneumogastric nerves has the characters of ordinary saliva, that which appears—rarely—when the sympathetic is galvanised is much less in quantity, is thick and less transparent, and requires for its production a longer application of the stimulus. This agrees with the results arrived at by Czermak, Cl. Bernard, and Eckhard. When the lingual nerve and chorda tympani are divided, galvanisation of the pneumogastric nerve does not produce an increased secretion on the side on which the section has been made; while, on the other side, an increase is produced. When both lingual nerves are divided, no effect results from galvanising the pneumogastric; but, when the lingual nerve is divided so as to leave the chorda tympani connected with the central part of that nerve, then there is an increased flow of saliva after galvanisation of the *par vagum*. These facts, according to M. Oehl, prove that the salivation which accompanies the nausea and precedes the vomiting produced by excitation of the pneumogastric nerve, is due to a reflex action of that nerve, conducted to the lingual nerve by the chorda tympani. It is probable also, that stimulation of the gastro-intestinal mucous membrane acts on the submaxillary gland in the same way as in the salivation attending the presence of intestinal worms. The secretion of the submaxillary glands is energetically excited by introducing into the stomach stimulants—such as infusions

of mustard or pepper—so long as the pneumogastric nerves remain intact. The reflex action of the pneumogastric does not extend to the parotid gland. (*Gaz. Médicale de Paris*, 27 Août, 1864.)

## Reviews and Notices.

**CLINICAL LECTURES AND REPORTS BY THE MEDICAL AND SURGICAL STAFF OF THE LONDON HOSPITAL. Vol. I. London: 1864.**

WE are glad to find another hospital issuing its volume of Reports. This combination on the part of the members of a hospital staff has advantages in many ways; it is indicative of energy and of mutual good feeling. The hospital is then no longer represented merely by a number of scattered individuals, but by a body of men; and we see, so to speak, what it is doing for medical science. The efforts of each contributor gain, if not in intrinsic value, yet in importance and effect, by association with other valuable work; and every good paper reflects credit on all the rest. The volume before us in this way sustains and advances the reputation of the London Hospital, and of each member of the staff.

MR. HUTCHINSON is the chief representative of the surgical division of the staff. Among his contributions, we find a Clinical Lecture on Leucoderma, with eight cases. The diagnosis of this affection (absence of pigment) from pityriasis versicolor, and from bronze-skin disease, is clearly given; the main points being the unnatural whiteness of the patches of skin affected, and their well-defined, convex, or spreading margins. He gives also a report of five cases of true Leprosy, a disease rarely seen in this country, and never arising here. His "conjectures" as to its pathology and etiology may almost be termed conclusions, so clear seems the chain of reasoning on which they are founded. They are, briefly, that it is specific in character, due to endemic influences, of which food seems to be the most potent, the offending article of diet being probably fish, as the disease occurs only near the sea.

Of greater importance is a long series of cases of Cerebral Amaurosis, brought forward by the same surgeon as evidence on the question of the causation of a common form of this affection by the use of tobacco. This evidence is alarmingly one-sided for smokers, and, until neutralised by a similar list of cases observed with the same care and pointing in the contrary direction, must be held to give a high degree of probability to the hypothesis which connects smoking with the symmetrical amaurosis due to atrophy of the optic nerve.

There is further an interesting Clinical Lecture on Pemphigus and its Curability by Arsenic, with fragments of others, all well worth careful reading.

MR. MAUNDER supplies a number of cases more or less interesting, and attempts to trace the mode in which Hospital Gangrene was propagated in a recent outbreak of that disease.

MR. CURLING's name appears in connexion with some rare Fractures and Dislocations of the Vertebrae. MR. COUPER gives somewhat prolonged accounts of a Hernia without Sac, and of an attempted Reduction of a Dislocation of the Jaw of four months' duration. MR. LITTLE gives his experiences of the Prussian Camp in the Schleswig-Holstein Cam-

paign. Some Gold Medal Reports complete the surgical portion of the book. If, as the editors say, they deserve permanent record, in our opinion this it not exactly the place for them.

From the physicians we have Gleanings from the Field of Observation, by Dr. ANDREW CLARK, varied and fragmentary for the most part, as the title indicates, but all valuable. We may mention the note concerning the Products of Pneumonia, and the Observations respecting a hitherto unnoticed Condition of the Urine in Disease (a violet reaction on the application of the sulphate of copper and potash test), and its probable Relation to the Habitual Exhalation of Ammonia from the Skin and the Temporary Occurrence of Albumen in the Urine, as very large handfuls, or indeed whole sheaves, rather than gleanings.

From Dr. DAVIES we have a Clinical Lecture on Acute Rheumatism treated by free Blistering, with tabular statements of ten cases. The results of this treatment are most remarkable. The pain is quickly removed; the temperature of the body falls; the pulse becomes less frequent; and the urine neutral and abundant. The recovery is rapid and complete. The theory is, that there is a determination of the blood-poison to the inflamed joints, and that this is removed in the serum of the blisters. A broad strip of the emplastrum lyttæ is applied all round the limb, near but not over the affected joint, and allowed to remain till free vesication takes place, after which the escape of serum is encouraged by poultices. Should the results obtained by Dr. Davies be confirmed on more extended trial, we shall not only have an important remedy for acute rheumatism, but the theory may be applied to the obstinate cases of chronic rheumatism and so-called rheumatic gout.

Dr. HUGHLINGS JACKSON contributes a Clinical Lecture on the Study of Diseases of the Nervous System; a number of interesting Cases illustrating these affections; and a paper on Loss of Speech—its Association with Valvular Diseases of the Heart, and with Hemiplegia on the Right Side, etc., the main points of which have already been brought before the profession. In his most important speculations, he has been anticipated by M. Broca, as he mentions; but much merit remains with him. He was the first in this country to remark the association of loss of speech with right hemiplegia; and from this and other observations in epilepsy, etc., he arrived independently at the conclusion, or hypothesis rather, that the faculty of language was seated in the left cerebral hemisphere. The numerous cases given are by no means of equal value; and we think their mutual relations and their bearing on the question would have been much more clear if Dr. Jackson had observed throughout the distinctions he has laid down in his preface between language and speech, and had classified his cases accordingly. This is of greater importance than appears at first sight, or even, in our opinion, than is recognised in M. Broca's distinctions into "the general faculty of language," and "the faculty of articulate language." There is a vast interval between the loss or derangement of a mental faculty—language—and the loss or destruction of one means of exercising this faculty—speech; this, again, being different from the mere loss of the power of articulation.

We cannot do more than mention Dr. RAMSKILL'S

contributions on Dilatation of the Heart, with Difficulty of Articulation, etc., and on two cases of Algæsia and Hyperæsthesia; or Dr. DOWN'S successful application of Bantingism, and of the Ammonia treatment of Scarlatina; or Dr. BARNES and Mr. HECKFORD on the Causes and Conditions of Still-Birth; or the Notes of Cases by Dr. WOODMAN.

The volume, in truth, contains much valuable matter; and the London Hospital may be congratulated on its appearance.

HOOPER'S PHYSICIAN'S VADE MECUM: A Manual of the Principles and Practice of Physic; with an Outline of General Pathology, Therapeutics, and Hygiene. Seventh Edition, greatly enlarged and improved. By WILLIAM AUGUSTUS GUY, M.B. Cantab., F.R.C.P., Professor of Forensic Medicine, King's College, etc.; and JOHN HARLEY, M.D.Lond., F.L.S., M.R.C.P., Assistant-Physician to King's College Hospital, etc. Pp. 791. London: 1864.

THIS venerable practitioner's guide has during some years past undergone from time to time a process of rejuvenescence at the hands of its able editor, Dr. GUY, who has on the present occasion associated with him as his colleague, Dr. JOHN HARLEY. The whole of the first part, on General Pathology and Therapeutics, occupying in this edition 280 pages, was added to the original work by Dr. Guy. It now consists of six chapters, viz.: 1, Health and Disease; 2, Causes of Death; 3, Outline of Physiology and General Pathology; 4, Examination of the more important Symptoms and Signs of Disease; 5, Hygiene; 6, General Therapeutics.

The second part—that on the Practice of Medicine, answering to the original work of Dr. Hooper—has been generally brought down to the level of the latest improvements in pathology and practice. Among the principal alterations which this part has undergone in the present edition are the following. In the division of General Disease, additions and alterations have been made in the chapters on Dropsy, Fevers, Diphtheria, and Gout. In Special Disease, the authors have amended the chapters on Diseases of the Brain and Spinal Cord, and have made additions regarding the Administration of Chloroform, and on various diseases of the Circulatory System, as well as on Chest-Diseases, including the Special Diseases of the Larynx and the Use of the Laryngoscope. Every chapter has, in fact, received additions in which most of the recent investigations of the diseases of various organs are noticed.

There seem, however, to be a few matters of practical interest, which the editors have passed over too lightly; such, for instance, as the formation during life of fibrinous deposits in the heart and large vessels, independently of inflammation of these parts. The importance of an acquaintance with this phenomenon is, we think, sufficiently established to warrant its notice in a book of the kind before us. Again, we cannot find any reference to wasting palsy or progressive muscular atrophy.

On the whole, however, the editors have well performed their task of epitomising modern medical knowledge for the use of the practitioner; and we have pleasure in commending this, the most recent result of their labours, to the favourable consideration of our readers.



ADDRESS ON CHEMISTRY, IN ITS RELATIONS TO MEDICINE AND ITS COLLATERAL SCIENCES. BY WM. BIRD HERAPATH, M.D.Lond., F.R.S. L & E. Read before the British Medical Association, 1863. Bristol: 1863.

THIS Address was, as our readers know, read at the Bristol meeting of the Association. Dr. HERAPATH now publishes and prefaces it with remarks, in which he accuses the BRITISH MEDICAL JOURNAL of "having purposely curtailed and refused it proper admission to its pages." But his preface is a complete justification of our having omitted the very few "objectionable" passages to which he alludes. Thus he himself, it appears, considers it necessary to assure his friends that, in those "passages which have been most condemned, he merely intended to object to members of the clerical profession restricting science within the literal text of the Holy Scriptures." In fact, he has to make explanations, and in some sort apologise to his friends for the insertion of the very passages which he condemns us for omitting. More than this: we find that he himself even does not exactly reproduce his own original text. Why, then, object to us for having omitted a few lines or words? At page 9 of his now published Address, for example, we find the following lines of text, and appended foot-note.

"The bearing of Organic Chemistry on Medicine may be further illustrated by that glorious gift of science to humanity so well known as chloroform, whose wondrous powers of alleviating pain and banishing mortal agony entitle it to the well-merited appellation of the 'divine essence'."<sup>\*</sup>

\* "In the original address, 'the appellation of the divine essence or holy spirit' was employed by the author in the same sense as we say holy water, or the divine Dante; but as some of the more bigoted members could not perceive the real meaning of this expression, it has been thought possible that the public generally may be equally misled by their prejudices, and thus the objectionable portion has been omitted."

Is Dr. Herapath fair in condemning us for having omitted passages which he admits "have been condemned", and which he himself designates as "objectionable"?

TESTIMONIAL TO THE MESSRS RUMP. On October 14, at a public dinner, nearly seventy gentlemen, including the Earl of Leicester (Lord Lieutenant), H. Lee Warner, Esq. (High Sheriff), the Rev. J. W. Methold, etc., being present, a testimonial was presented to the Messrs. Rump, surgeons, of Wells, Norfolk, on their retirement from long and extensive medical practice—Mr. Rump, senior, having practised in the town for upwards of fifty years. A committee had some time been formed for this purpose, and the appeal, as anticipated, from the high esteem in which the Messrs. Rump are held, was cheerfully responded to both by rich and poor. The sum of £253 was collected, and with this amount an elegant service of silver plate was purchased, consisting of four corner dishes, a soup tureen, and two small sauce dishes, with ladles to match. In addition to the plate, an illuminated book was prepared, containing the name of every individual who had subscribed to the testimonial (without any sum of money being placed against the name), and the following heading:—"To Hugh Rump, and Hugh Robert Rump, this service of plate is presented by a number of friends and patients, to preserve the remembrance of the wise and prudent care of the father during more than fifty years' extensive practice, the rare skill and knowledge and energy of the son, and the uninterrupted humanity and kindness of both."

## British Medical Journal.

SATURDAY, NOVEMBER 5TH, 1864.

### THE PROVIDENT FUND.

UNDER the auspices of the British Medical Association, what promises to be a most excellent institution—the Provident Fund—has been fairly launched into existence. The machinery for working it has been formed; and an honourable Board of Directors, in whom the profession has full confidence, has been elected to carry out the scheme. We would, therefore, earnestly beg those who feel a warm interest in the success of the undertaking, to leave it for the present in the hands of the Directors.

Wisdom—calm, calculating wisdom—must stand at the helm, if stability is to be given to the Fund. A Provident Fund of this kind naturally excites our sentiments and our feelings; and assuredly all of us desire sincerely that the members of our profession should have every kind of benefit which a provident fund can afford them; but we must sternly remember that schemes of this nature are, above all others, liable to fail through indulgence in warmth of feeling. We must, therefore, beg our brethren to allow the matter now quietly to pass into the cold calculating hands of the actuary. Science must take up the scheme, at its present stage, in order to fix it on a firm and secure basis. A failure of this particular Fund, at this present moment, would be a serious calamity to the whole profession; for it may be safely affirmed that if, under the auspices of our Association, the scheme should fail, it would have little chance of being revived again in the hands of private individuals. What has ever been the bane, and in many cases the destruction, of Funds of this kind, has been the attempt to do too much; sentiment has carried away reason. We would, therefore, earnestly press upon the profession the necessity of their advancing slowly in the matter, in order that they may advance *tuto et jucundè*. *Festina lentè* must be the motto of the Directors at this present moment.

We venture to press these considerations, which are really merely the dictates of prudence and common sense, upon our brethren, because we know that the Directors, and especially their indefatigable Chairman, are overwhelmed with proposals and urgent demands touching the distribution of the benefits of the Fund. Assuredly the Fund is incapable, at its present stage of existence, of doing all that is asked of it; and assuredly, therefore, we, as wise men, must be content not to try to get more benefits out of it than the men of calculating science—the actuaries—tell us it will legitimately produce. To do so would, indeed, be playing the old game of

killing the gold-egg-laying goose, in order to get all at once at the golden eggs. Calm consideration will satisfy every one that a scheme like this must undergo development; that it cannot possibly become all at once a full and perfect institution, meeting all the wants of our profession. Calm reason, therefore, bids us to begin at the beginning, and not launch out at starting into great designs which may endanger the success of the whole concern. The homely proverb of "half a loaf being better than no bread" is the proverb to fit us at this moment. We must, at starting, drive quietly, and be content with a Provident Fund alone. As we grow in strength, and our muscles enlarge, then we may go into further good things; we may indulge in a Widows' and Orphans' Fund, and, in fact, gradually advance step by step, until at length, as all of us sincerely hope, we may one day find the Provident Fund developed into a great medical assurance association, capable of meeting and providing for all the accidents touching health and life which may fall upon the members of our profession.

#### ENUCLEATION OF EYES.

WE cannot but congratulate the profession upon the numerous ophthalmological critics, reviews, etc., which have lately sprung into life. Ophthalmic surgery and diseases of the eye have been, during the few past years, studied with remarkable industry; and, as every one knows, very great differences in opinion and in practice have been the not unnatural result. A critical study of the new practices and proposals of the day will necessarily lead to the separating of the wheat from the chaff; and will, no doubt, one day bring us to something nearer settled rules of practice than we have arrived at, at present.

The subject of what, in modern language, is called the Enucleation of the Eye is one, amongst others, which would, we cannot but think, be the better for a little canvassing. This operation, once so rarely performed, and still so rarely performed by many eye-surgeons, appears in the practice of some of our modern ophthalmological authorities, an affair of what we may call every day occurrence. Either in connexion with, or co-incidentally with, or as a mere sequence of, iridectomy, has enucleation of eye become, in some hands, quite a common operation.

We, of course, offer no opinion as to the value of the operation in itself, or as to its desirability or rather necessity as a daily operation; but we cannot but note this very important fact, plain to every one; viz., that the practice of some eye-surgeons in this respect is in direct opposition to, and therefore in some sense a condemnation of, the practice of other eye-surgeons. It cannot, assuredly, be a matter of indifference to the patient that he should, or should not, have his eye enucleated. The operation must

be good or bad for him, a desirable thing or a thing not at all to be desired. But as the practice at present stands, there appears to be no rule to guide the hand of the eye-surgeon; so that, in fact, the enucleation (or otherwise) of the eye will, in a given case, depend entirely upon the school of surgery into whose hands the patient may haply fall. But we must all acknowledge this to be a misfortune; and would all gladly see unity of practice exist upon the point. What, for example, are we to think, and what will the public say, when they meet with facts like the following?

In a translation of Zander on the Ophthalmoscope, the translator, Mr. R. B. Carter, incidentally tells us that he has enucleated at least a hundred eyes. His words are: "I have performed the operation" (enucleation of the eyeball) "more than one hundred times."

Then, on the other side, and as a contrast to this practice, we are informed that not so many as one hundred eyes have been enucleated in the Westminster Eye Infirmary since its foundation.

One single country surgeon, with, of course, a limited experience, has enucleated more eyes than have been enucleated by some eight metropolitan eye-surgeons, at a London eye-hospital, during something like half-a-century of practice!

We are not, let it be understood, venturing to criticise the practice of the Westminster Eye Hospital, or the practice of Mr. R. B. Carter; nor have we any opinion to offer on the point of practice. Our duty and intention are simply, for the sake of science and humanity, to mark the discrepancy in practice, and to call upon those who thus differ on such a very important point to subject their methods to a severe criticism; and so out of opposition to bring unity. As we started off with saying, we now conclude with saying, one practice must condemn the other. Both cannot be right; and, therefore, in the meantime, humanity suffers and eye-surgery requires enlightenment.

#### A PUZZLING CASE.

THE inquiry as to the death of the gas-inspector, King, to which we referred last week, has terminated in an open verdict. It remains, therefore, undetermined when and where the injuries he received were inflicted, and by what means. Apparently, they were not the result of accident; since, besides the fatal fracture, there were numerous bruises, some of them on the top of the head. The pathological evidence does not fix within a few hours the exact date; nor was this to be expected; and there would be no difficulty in admitting the possibility of the injuries having been inflicted in the park, were it not that the sufferer passed under the eye of the resident medical officers of St. George's Hospital, and



that their evidence is so positive as to the drunkenness and as to the absence of all trace of injury. Leaving this evidence out of consideration, the case would be the not uncommon one of insensibility from concussion of the brain mistaken for insensibility from alcohol, the compression by effused blood coming on later. If, on the contrary, we accept fully the statement that, when admitted into the hospital, he had received no serious injury, the charge is very definitely brought home to the police of beating the poor fellow to death, or at least of allowing him to beat himself to death, since there seems to be no suspicion of ill-treatment subsequent to his discharge from custody. Circumstances thus either give the testimony unusual value as fixing the responsibility of a crime, or throw upon it the discredit of causing much of the confusion in which the case has been involved. Further particulars are promised, in the form of a report to the governors of the hospital, which, it is said, will give another colour to the affair; at present, as we have said, it is remarkable for the contradictions by which it is obscured.

THERE can be no doubt that the Poor-law medical officers are much more indebted to Mr. Griffin than appears on the surface. It was not to be supposed that all the evils with which he had to contend would disappear at the first breath. What Mr. Griffin has done, is to enlighten authority as to facts; and to prepare the minds of people for a coming reform. That his influence has not been exerted in vain, is certain; that it will tell much more powerfully in the future than it does at the present moment, we verily believe. For this reason, and because, in our opinion, Mr. Griffin has played the part of an earnest and disinterested lover of his professional brethren's interests, it is that we call upon medical men to do him fitting honour in the matter of a testimonial.

THE Commissioners in Lunacy have issued the following advertisement, which is well worthy of the attention of the profession. It makes clear the state of the law on a point which has been hitherto not generally understood.

"*Lunacy.—Single Patients.* Office of Commissioners in Lunacy, 19, Whitehall Place, October 10th, 1864. The Commissioners in Lunacy, having reason to believe that many persons of unsound mind are illegally received or taken charge of, and that the law relating to insane persons not in asylums or licensed houses, but under individual care as 'Single Patients', is extensively violated, desire to draw the attention of medical practitioners and others to the provisions of the 8th and 9th Victoria, cap. 10, sec. 90, as amended by the 8th section of 16 and 17 Vic., cap. 96.

"By these enactments, no person (unless he derives no profit from the charge, or be a committee appointed by the Lord Chancellor) can receive one

patient in any unlicensed house, neither can any person take care or charge of any one patient as a lunatic or alleged lunatic without the same form of order and medical certificates as are required upon the admission of a patient into a licensed house, copies of which are to be sent to the Commissioners in Lunacy, together with other particulars, which are fully stated in printed instructions to be obtained on application at the office of the Commissioners, 19, Whitehall Place.

"By the first mentioned Act, every person neglecting to comply with the requirements of the statute is liable to prosecution for a misdemeanour.

"By the interpretation clause, the word 'lunatic' is declared to mean 'every insane person, and every person being an idiot or lunatic, or of unsound mind.'

"According to the law as laid down by the judges of the superior courts, the provisions and penalties of the Act apply to all cases of insane persons taken or retained under care or charge in unlicensed houses, whether or not they were of unsound mind when first received.

"The Commissioners will feel it their duty, in cases of violation of the law hereafter brought under their notice, to proceed by indictment against the offending parties.

"By order of the Board.

"W. C. SPRING RICE, *Secretary.*"

THE entries at the Liverpool School of Medicine are more numerous than they were last year. There is, moreover, a decided improvement in the class of students, as compared with former years. The regulations as to preliminary examination, etc., are, therefore, doing good here, as in the case of the Manchester School last week alluded to.

WHAT have the Medical Council to say in answer to the remarks on the *Pharmacopœia* made by Mr. Sandford, President, at a late meeting of the Pharmaceutical Society?

"The *British Pharmacopœia*—much as was said about it last session—was still unexhausted. It had been reported that a new edition would be issued, but he believed the report to be incorrect; and it was therefore necessary that the members should come to some understanding as to which *Pharmacopœia* should be in use. At the present time, a patient might have a prescription made up in one establishment with Infusion of Gentian P.B., and in another with the infusion made according to the *London Pharmacopœia*; and one or other was sure to be accused of a mistake. The members, therefore, ought to come to an understanding as to which they would work by."

From this it would appear that the druggists are thinking of settling the question for the doctors, and, in fact, of deciding which *Pharmacopœia*—the old London or the new British—shall be the accepted one in daily use. It certainly would be a curious climax to the history of the new *Pharmacopœia*, if the druggists were to decide which of the two should be the one for use, and should refuse to keep two sets of preparations of drugs in their shops. No one could deny that their refusal would have in it a show of reason.

M. VANZETTI of Padua has communicated to the Parisian Surgical Society his experience of digital compression, as a cure of aneurisms, during the years 1863 and 1864. His cases are eight in number, two of them being cases of false aneurism resulting from bleeding in the arm. In all his cases except one, digital compression produced solidification of the aneurism. The pressure was kept up from six to one hundred and twenty hours, and was performed by M. Vanzetti himself, by his pupils, and by non-professional assistants. Often it was suspended during the night, in order to let the patient have a good sleep. In the two cases of false aneurism, the pressure was applied both on the wounded artery and the vein; and in both the solidification of the aneurism was rapidly effected—viz., in six hours. It was to these two cases, and to this new method of applying digital pressure, that M. Vanzetti especially calls the attention of surgeons. If further experience confirm his experience,

“Surgery will have gained a simple, easy, and singularly effective method of treating and of curing a surgical operation, the cure of which, under all circumstances difficult, has been considered impossible without resorting to the knife.”

The communication of M. Vanzetti, we read,

“Was listened to by the Society with the greatest attention, not only on account of the importance of the subject, but also by reason of the elegance of the form in which it was introduced. The spiritual professor of Padua, in his anecdotal narrative, united to Italian *finesse* the piquancy of Gallic wit in its purest form.”

M. Velpeau related the case of a young man under his care in La Charité, who had a diffuse aneurism of the popliteal artery, in which solidification of the tumour was produced by digital pressure in twenty hours.

“The patient was suddenly seized with violent pain in the calf of the leg; and on the following day appeared a very painful swelling in the popliteal space.”

M. MEYER, in a sketch which he gives of the constitution, height, etc., of Christian and Jewish populations, particularly in the town of Fürth, makes out that the length of life of the Jew is greater than that of the Christian; that of the Jew being 37, and of the Christian 26 years.

*L'Union Médicale* thinks that the Minister of War, in his report showing the improvement in the health of the French army, might have said a word in favour of the excellence of the medical service. It is suggested that the works of the medical man probably may count for something in the diminution of the mortality of the troops.

The aspect of the medical profession in France, in relation to quackery and the illegal practice of medicine, gives little hope of any good being derived

from the interference of the government. The famous Fourcroy drew a sketch of the deplorable quackeries of his day; and on the strength of his report was founded the law of Ventôse, in the year 11 of the Republic. The terms of this law are clear. It declares that no one can enter the profession of medicine without due examination. It distinctly defines the powers of doctors, of *officiers de santé*, and of *sages femmes*. The object of the legislature was to protect the ignorance of the people against the cupidity of quacks; and to encourage those who devoted long years to study. But what has been the action of the law? The law is daily violated with impunity. *Sages femmes* take under their charge a number of diseases having no connection with accouchements; and quacks of every kind infest the country districts. And, in the meantime, the public prosecutor shows no sign. Is this silence an admitted incapacity or unwillingness on the part of authority to interfere with free trade in physic? If a well governed or much governed country like France can obtain no satisfaction for its medical men by the legal suppression of quackery, may we not ask, Is it likely that we shall be more successful in England?

We have already called the attention of our readers to the real or supposed curative influence over whooping-cough of the vapours which are disengaged from the matters used in the purification of coal-gas. M. Commerege has given the Academy of Medicine a report on the subject, drawn from the observation of the effects produced in 142 children affected with whooping-cough, who had been brought under the action of the gases in the gas works at St. Maudé. His conclusions are to the effect, that the treatment produces excellent results, and at all periods of the disorder. When it does not cure, it greatly ameliorates. In general, twelve *séances* are required for the cure; and each *séance* should be of two hours' duration. However young the patient, no danger results from the exposure to the gases. Then again we have Dr. Bertholles, who informs the French Academy of Medicine of the effects observed to result from the inhalation of the vapours disengaged from the remains of the materials used in the purification of gas, by children having whooping-cough. “The register of the coal works at Ternes show that, during the past six months, 901 patients have been subjected to the vapour-treatment; and that of these 219 were cured and 122 relieved. The favourable results are probably to be attributed to the ammoniac gases and the tar-vapour associated with it.”

It is difficult to understand upon what grounds M. Koerberlé, who is undoubtedly merely a copyist of the English in the matter of ovariectomy, demands of his Academy of Medicine, that his name be admitted as a candidate for the Barbier prize, on the strength of his doings in ovariectomy.



# Thirty-ninth Annual Meeting

OF THE

## ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

[Continued from page 497.]

THE Sections resumed again early on Wednesday, the 21st. The Medical Section, after some preliminary business, listened to an address by Dr. Stamm of Berlin, on the Possibility of Destroying Epidemic Puerperal Fever. He discussed the various modes in which puerperal fever might originate, and said that the tainted fingers of accoucheurs were not sufficient to explain its genesis in all cases. Impure air had as much to do with it as any other agent. In the year 1862, an outbreak occurred in the obstetric clinic of Professor Braun (we believe, of Vienna); and it was then shown that by a methodic ventilation of the rooms, without any regard to the state of the weather, the mortality was signally reduced. He then showed how rarely such a fever occurs to poor persons giving birth to their offspring in the open air almost, and how prevalent it is with primiparæ and persons who have sustained some injury during labour, and therefore remain longer exposed to the influence of noxious emanations. He further strengthened this argument by showing that this fever prevailed in winter more than in summer, because, in cold climates, the people did not ventilate their rooms during winter; and that the mortality from it was much lower in England than anywhere else, because there the ventilation of rooms was better attended to.

About a fortnight before this discussion, I was present at a meeting of the Medical Society of Frankfurt on the Maine, where the same subject happened to be under consideration. I learned that in this town of about forty thousand inhabitants there occurred a certain number of cases of puerperal fever, and that about twelve or fifteen *per annum* represented the entire mortality from this disease. The speakers all agreed that what was commonly termed puerperal fever was not a disease *sui generis*, like scarlet fever or typhus; but that under that name a variety of diseases were understood, which were incidental to the puerperal state, or accidentally complicated it; and that no discussion on the subject was of much value, so long as these various pathological conditions were not held apart, and defined and diagnosed with greater accuracy. It will be perceived that this is the old theory of Stoll, worked out into intolerable generality by Eisenmann. Since Ferguson and Locock, not to speak of younger English authors, wrote on the subject, much progress has, no doubt, been made; but as much at least remains to be done in differentiation as Helm had done in his monograph in 1840. I will adduce the so-called scarlet fever or purpura of puerperæ as a subject for immediate inquiry. Since the late observations on the purpura after surgical operations, it is incumbent upon all observers to study the difference or similarity of the two symptoms, and to ascertain whether the puerperal can be considered as a traumatic purpura; and, next, what is the nature of the relation between the trauma and the effect upon the general system and the skin. Meanwhile, all should make it clear to themselves, and to others, that "puerperal fever" is only an expression of convenience, used to signalise acute and dangerous diseases incidental to

the puerperal state. That these are frequently caused and can be destroyed in the manner indicated by Dr. Stamm, I have not the slightest doubt.

Professor Seitz of Giessen next spoke on a peculiar phenomenon observed by auscultation in lungs in which caverns are forming. In the beginning of the inspiration, a sibilant noise is heard, which changes suddenly into uncertain, bronchial, even amphoric breathing. I have myself carefully observed the phenomenon in the *clinique* of Dr. Seitz, and found it very striking. It occurs only in and about caverns, and not rarely is the only symptom of existing caverns; but it is much more rare than the other well known symptoms of caverns. Not rarely it disappears in the same case at times, and reappears at others; it is sometimes very marked, at others indistinct. From experiments with an india-rubber tube, it appears that the noise in question is produced by the entrance into the cavern of air *through a narrow aperture*, which, with the progress of the inspiration and the distension of the cavern, becomes also distended. Professor Seitz also exhibited a new form of plessimeter, and showed its advantages. They are considerable, as I can testify, having had one, presented to me by the inventor, for now several weeks. With Seitz's plessimeter and Radcliffe's thimble, a man is armed for any amount of percussion. With me, these instruments are constant residents of the pocket.

Professor Mosler presented a new case of scleroma of the skin in a single lady aged 28, distinguished by the circumstance that the disease has been proved to have commenced with a lymphatic dropsy of the face and the upper and lower extremities—in fact, with the same group of symptoms which have always been stated as constituting the beginning of the elephantiasis Arabum. The swelling was succeeded by hardening, discoloration, and retraction of the skin, which can yet be observed in many places, although the patient is much improved. On the chest, reaching nearly to both breasts and over the clavicles, the skin is in that state which has latterly given rise to the distinction of a particular kind of scleroma of the skin; namely, the cicatrising form. Of the many remedial agents employed in this case, large doses of iron, cod-liver oil, and vapour-baths had the most effect.

In the Mineralogical Section, Von Dücker spoke on the mode of formation of the Swiss Mountains, which he explained as the result of a kind of shrivelling of the crust of the earth, without any elevation from below. Professor Streng showed a new map of the Hartz Mountains. He also spoke of the Ice Mountain at the Dornburg, near Hadamar. The slopes of that mountain are constantly covered with ice, produced by the evaporation of water, which trickles through the pores and interstices of basaltic, loose, gravel-like layers.

The Section for Physics was entertained by Professor Poggendorff with an account of the phenomena which are observed with certain modifications of the metallic connections of Ruhmkorff's Induction Coil.

The Section for Botany got manna to eat. Director Haidinger of Vienna had sent a great number of the *Parmelia esculenta*, which had fallen as a manna-rain near Karput, in Asia Minor, in the month of March of the current year. He has published a longer account of this phenomenon in the reports of the meetings of the Austrian Academy of Sciences. This *parmelia* is a lichen, and was particularly noticed for the first time by Thénard, who, on the 3rd of August, 1828, presented some to the French Academy; this had been collected by a Russian general of the Persian army, in the neighbourhood of Mount Ararat. It there fell from the air, having been carried by the

wind from the rocks where it grows. In its moist state, it can be eaten by animals and man. It explains the statement in the Jewish records about "man-hu". What is commonly termed manna now, a peculiar kind of sugar, is the inspissated juice of ash-trees, and cannot be supposed to have fed the Jews in the desert.

Both the foregoing Sections had yet much matter brought under their notice, which was of great interest and importance to their respective listeners. The Physical Section met again in the afternoon, to witness remarkable demonstrations of sounds produced in iron and steel rods while they are magnetised, and in metal tubes through which an interrupted current passes in an induction-coil.

The Section for Midwifery and Diseases of Women discussed a number of single cases brought under their notice by Professor Rindfleisch. In a case of milary abscesses in the heart of a puerpera, he found, not pus, but vibriones. Here is another proof of the necessity of further study regarding the puerperal diseases. There were yet cases of papilloma cysticum from the vaginal portion, of foetus in foetu, of vagina divisa and uterus duplex, of congenital atresia duodeni (with which a child had managed to live for four weeks), all interesting in their kind, but offering no scope for more general considerations.

Anatomy and Physiology were up at seven o'clock, and saw a kymographion of Professor Fick in motion, to which a poor cur furnished the arterial power. At eight o'clock, they were again in their old meeting-place, the Academic Aula, and appointed a commission to investigate a glass in which "beans" had been preserved for several weeks, the glass being hermetically closed. The commission, consisting of Professors Henle, Schaaffhausen, Dr. Schmidt of Frankfurt, and several others, found in the contents of the glass no moving organisms, but only the dead bodies of some vibrios, whose age could not be determined. Dr. Preyer then spoke on the Revivification of Muscles which are already in the State of Rigor Mortis. In his experiments, he had used muscles set artificially into a state of rigor by injecting cold water, or warm water of 45° C., or chloroform. A solution of 10 per cent. of chloride of sodium, or solutions of carbonate and nitrate of sodium, injected in such muscles, changed their properties in some degree, and restored irritability. Preyer concludes that the irritability of muscles depends upon fluidity of the muscular plasma.

Dr. Rosenthal made a communication on the Causes of the Respiratory Movements. He maintains that they depend upon the irritation of the *nerve vital* by blood containing carbonic acid. When the blood contains more oxygen, it extinguishes the irritation of these ganglia.

Dr. Rüdinger demonstrated some sharp dissections of nervous fibres which pass from the anterior and posterior roots of the lower intercostal nerves to the sympathetic, and thence to the splanchnic nerve. Then there were communications on the epitrichium, the uppermost layer of the epidermis; on amoeboid movements in the spermatid cells of mammalia; on a malformation in the genitals of a male pig; and on the normal position of the womb; whereupon the meeting adjourned.

In the Zoological Section, there was a communication by Chevalier Franenfeld, on the Metamorphosis of Insects. Professor Pagenstecher remarked, in the discussion, that the larvæ of the small fly *Cecidomyia*, which live in residues from the preparation of beet-root sugar amongst anguillulidæ, show a kind of asexual multiplication resembling that of echinococcus. He observed such larvæ with embryos in the interior. Forrester Hartig spoke on the dorsal vessel

of the insects, and on the varieties of circulation. After some discussion, he made a communication on the Parthenogenesis of the Cynipidæ. He had during twenty-five years reared gall-flies from galls, but only obtained female individuals from the genus cynips and neuroterus.

The Section for Chemistry and Pharmacy was opened by Dr. Buff with a communication on the Volume of Cyanogen and its Compounds. He alluded to the anomaly presented by cyanogen, in that it was an apparent exception to the law discovered by Kopp concerning the specific volume of fluid compounds of like elements. As cyanogen can be transformed into methylamin, the speaker assumes that the nitrogen of the cyanogen is active with only one affinity, the carbon with only two. He detailed some experiments, and came to the general conclusion, that the specific volume of the elements is dependent upon the number of equivalents with which they are active.

Dr. Thudichum of London spoke of a sulphuretted product of decomposition of animal substances, which could be extracted from the mother-liquor of leucine and tyrosine by means of ether. He had named it "thiotherione", in token of its origin and its 19.9 per cent. of sulphur. He described its properties, and stated that he had also found it in pathological livers. He believes it to be poisonous, and to contribute to the dangerous symptoms of malignant jaundice. Dr. Remelé described the composition of the precipitate which sulphide of ammonium produces in salts of the oxide of uranium. He found it to be oxisulphuret,  $U_2O_3 \cdot S$ . Professor Böttger demonstrated Bothe's process of silvering glass, and produced magnificent mirrors. He also described and demonstrated a new method for extracting selenium from the mud of sulphuric acid chambers. Dr. Frank described the salt-mines at Stassfurt, in Prussia; and illustrated his lecture by means of drawings and specimens. These mines are remarkable by their yielding large quantities of potash and magnesia salts, besides a little boracite. These salts occur in peculiar combinations, mineralogically known as carnallite, kieserite, boracite, and tachydrate. The rock-salt had been found upwards of one thousand feet thick, and was not yet penetrated. Many great manufactories of all kinds had arisen round the mine. I have myself been at Stassfurt, and seen the mine, and been struck with its beauty, richness, and the admirable manner in which it is managed. The country all round looks like the busiest part of Lancashire. It is an inexhaustible treasure of Nature which lies there eleven hundred feet below the surface. The descent is made in two minutes. Arrived below, you are at once greeted by the salute of the German miner, "Glück auf!" You of course reply, "Glück auf!" and thus, constantly exchanging friendly greetings with every person you meet in the deep, you pass through the sparkling, vast, hall-like galleries. In the working galleries, men are naked, merely wearing a slight pair of trousers. The heat is near blood-heat. Gunpowder is used to blast the salt; and this produces so much sulphuretted hydrogen that, after a series of mines have been sprung, the miners are obliged to desert that part for a time, until the noxious gas has become diffused. I studied this feature from a medical point of view. I found so much sulphuretted hydrogen in the mine, that it blackened my silver watch. Much of the rock-salt is so pure, that it only requires to be ground in a kind of coffee-mill and between stones, to be ready for use as the finest and whitest table-salt. Having loaded my pockets with specimens of crystal salt, transparent like glass, and so pure that it can be fused with a blowpipe at the sharp edge without cracking, and



with the specimens of the other minerals, particularly the sulphate of magnesia with only one equivalent of water, but insoluble in water, which I intend to try as a medicine in certain digestive derangements.—I ascended the shaft again in two minutes, meeting halfway, as before the up-going, so now the down-going cage, as a kind of apparition or flying Dutchman.

However, from this digression into the Stassfurt mines, I return again to the Chemical Section of the Congress at Giessen. Professor Strecker of Tübingen related the results of his experiments on the reduction of nitro-compounds by means of sodium-amalgam. Dr. Naumann then made a communication on the effect of bromium upon benzoic ether and nitrobenzoic ether, whereupon the meeting closed.

The Section for Surgery received some important communications. Professor Weber of Halle gave a lecture on the Effects of Common Water upon Wounds and Ulcers. He thought water was by no means an indifferent agent, and should be substituted by milk, vegetable resinous extracts, or, best, a solution of common salt in water of a certain degree of concentration. In such salt water he had let patients bathe chancrous sores with the best effect; ulcerations on the feet he had kept for a long time in such solutions, and cured them; nay, he had performed thoracentesis upon two patients while they were immersed in a bath of such salt water, and cured their empyema. In the clear salt water, it could be seen how at the expiration the thick pus issued through the wound, and how at the inspiration the salt water entered the thorax and washed out the pus. Professor Bardeleben next gave his experience on Schinzing's method of resetting a dislocated head of the humerus. In this process, the operator puts his left hand against the chest of the patient, and, extending the arm with his right hand, rotates it outwards. The head is said to return into the capsule without pain, and easily; the operation requiring no chloroform. In one case of Bardeleben's, the operation did not succeed, but the ordinary method afterwards restored the head to its place; in a second case, fracture of the surgical neck took place, and a pseudarthrosis remained. In the discussion, Professor Roser remarked, that the method was older; and that the rotation had to be made, not outwards, but inwards. In one case, he had himself torn off the tuberculum minus; but the patient was well satisfied with his arm. He said that he replaced every dislocated humerus without pulley or assistant. After several successful and unsuccessful cases of treatment by this method had been related, Professor Bardeleben reported a case in which the point of a knife had penetrated the skull, and had then broken off. He made room in the substance of the bone by means of a little chisel and hammer, and then withdrew the point of the knife. Pus ran out of the opening; the symptoms of encephalitis ceased; and the patient recovered. Roser remarked, that the chisel in such cases had first been used by Stromeyer. Professor Textor showed an exostosis which he had successfully removed from the frontal bone of a girl. The meeting of the Section then adjourned.

[To be continued.]

**POPULAR MEDICAL WORKS.** Mr. Banting, of corpulence notoriety, has, he tells us, sold 50,000 copies of the third edition of his pamphlet. On the sale there is a profit of £171, and this sum he distributes as follows:—To the Printers' Pension Society, £50; to the Royal Hospital for Incurables, £50; to the British Home for Incurables, £50; to the National Orthopaedic Hospital, £10; 10.

## Association Intelligence.

### BRANCH MEETING TO BE HELD.

| NAME OF BRANCH.                                | PLACE OF MEETING.   | DATE.                       |
|--|---|-----------------------------|
| BIRMINGHAM AND MIDLAND COUNTIES.<br>[General.] | Medical Department,<br>Birmingham Library,<br>Birmingham. | Thursday,<br>November 10th. |

### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting will take place at the Fountain Hotel, Canterbury, at 3 P.M., on November 17th. Gentlemen wishing to read papers are requested to forward their names forthwith to the Secretary,

ROBERT BOWLES.

Folkestone, October 1864.

### HULL BRANCH: GENERAL MEETING.

THE second general meeting of the Hull Branch was held at the Vittoria Hotel, Hull, on Thursday, October 27th, 1864. It was attended by a large number of members and visitors. The chair was taken by JAMES DOSSOR, Esq., President.

The minutes of the last general meeting were read and confirmed.

*Medical Provident Fund.* On the proposition of Mr. J. H. GIBSON, seconded by Dr. CARNLEY, Dr. H. Munroe was unanimously elected a Director of the Provident Fund.

*Communications.* The following communications were made:—

1. Ascites cured by Elaterium and Aqua Regia. By J. H. Gibson, Esq.
2. Remarkable case of Lithotomy. By K. King, M.D.
3. The Peculiar Application of Photography to the Recognition of Deceased Persons. By J. Dossor, Esq.
4. Case of Osseous Deposits in the Muscular Structure of the Heart. By J. Brownridge, Esq.
5. Microscopic Examination of Hair taken from the Female Bladder. By H. Munroe, M.D.
6. The Magnesium Light was exhibited by T. Walton, Esq.

*Dinner.* The members of the Branch, with their visitors, then dined together, and spent an agreeable evening.

### SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETING.

THE second meeting for the eighth session, 1864-65, was held at the West Kent General Hospital, Maidstone, on October 28th; S. MONCKTON, M.D., in the chair. Twenty-one members and visitors were present.

*New Member.* Matthew Algernon Adams, Esq., of Maidstone, was elected a new member (subject to the regulations of the Association respecting confirmation at the Branch annual meeting).

*Death of a Member.* James Connell Prance, Esq., late of Maidstone, was reported, with regret, as deceased. He practised for about fifty years. He left books and instruments to the West Kent General Hospital.

*Communications.* The following communications were made.

1. Case of Severe Injury to the Brain; the patient surviving thirteen months. By F. Fry, F.R.C.S.

2. Case of Spontaneous Withdrawal of the Arm, and Cephalic Birth, succeeding to Arm-presentation. By George H. Furber, Esq.

*Discussion.* The discussion that was referred, in September, to the present meeting, was resumed. The result was as follows.

Resolved: to continue the present number of meetings annually—viz., four; to meet at hospitals, when there be such institutions in the towns at which meetings take place; to continue the custom of a dinner after each meeting; to limit the charge of dinners to 10s., inclusive of wine; and to continue the rate of the present district subscription—viz., 2s. 6d.

It was announced that the number of members amounted to sixty-one, besides four honorary members.

Charles J. Pinching, Esq., of Gravesend, was appointed (subject to his approval) chairman of the next meeting, in March 1865.

*Dinner.* The members and visitors adjourned to dinner at the Mitre Hotel.

## Correspondence.

### TREATMENT OF PARTURIENT WOMEN.

LETTER FROM WILLIAM LEGGE, ESQ.

SIR,—In the few remarks I propose making on this subject, I cannot pretend to offer anything original; and I trust it will not be thought to savour of presumption, if I advance, or maintain, sentiments which may be at variance with those of some, whose age and experience challenge deference; but believing, as I do, that correct and successful practice may be materially assisted by the contribution of carefully observed facts (the relative value of which must be the same, however limited the sphere of observation), I venture to submit the results of my experience, in the opinion I have formed as to the most judicious management of puerperal women, especially with regard to their dietetical treatment. That there is a great change of opinion and practice in such treatment, few will deny; and I think we are justified in regarding it as one of those evidences of advancement in the intelligent practice of medicine, which meet us in every branch of our profession, and mark the present as an era of scientific progress, when none may rest upon their oars, and all adopt the motto,

"Ne cede malis, sed contra audentior ito."

A retrospect of the steps by which this improved position has been attained, induces a comparison, which cannot fail to be disadvantageous to the past; yet we must not too hastily censure the seeming deficiencies of our predecessors, nor plume ourselves on the possession of knowledge, either gained by the light of their mistakes, or the result often of their experience.

In reviewing the practice of the past generation, we can scarcely be surprised to find that the very general adherence to depletive measures in the treatment of disease, influenced the management of the puerperal state; for the fact that parturition is simply a natural physiological process, not an abnormal occurrence, was totally unrecognised. As a disease it was regarded; as such it was treated; low diet was strictly enforced, and (as we cannot but conclude) with disastrous effects. In dismissing the idea of disease we also dismiss the necessity for interference, save in the shape of assistance; hence it follows that, if such interference be practised, the result will be

evil. Now, if this view of the case be correct, our great aim must be to give such assistance to the powers of Nature, as shall enable the patient to rally from the exhaustion consequent on the nervous shock, the severity of the labour pains, and the subsequent hæmorrhage. First in the catalogue of means to this end comes sleep,

"In Nil Nature's sweet restorer."

In some cases this is most difficult to obtain, and every one must be familiar with instances where wakefulness has persisted through many weary hours, despite all means used to subdue it. I have found this generally associated with a tendency to secondary hæmorrhage. I am accustomed, regarding sleep as of the utmost importance, to administer from forty minims to one drachm of vinum opii; although this may seem a large dose, I have never found it too large, and in its satisfactory effect far preferable to repeated smaller doses; the severity of the after-pains is mitigated, and the patient awakes greatly refreshed. An idea even now prevails that these after-pains are necessary, and a provision of nature for ensuring the due contraction of the uterus; but experience proves that no patients do better than those in whom these are controlled; moreover, where the pains are excruciating, the uterus will be found firmly contracted; and, again, the absence of these pains in primiparæ is a negative proof that they are not essential.

In illustration of the impunity, or I should rather say the advantage, with which full doses of opium can be given, I may cite a recent case in which, after a severe labour, with arm-presentation requiring version, hour-glass contraction of the uterus necessitated the introduction of the hand for the removal of the placenta. Great prostration followed; one drachm of vinum opii procured quiet sleep; on the recurrence of pain the next morning, accompanied by accelerated pulse, the same dose was repeated with the best result, and the patient recovered without a bad symptom.

With regard to that *questio vexata*, the administration of alcohol in cases of flooding, I think all who have encountered this terrible foe must concede that, however ingenious the theories which dispute its efficacy, alcohol is our sheet anchor, and the actual fact of its efficacy is evidenced by the satisfactory result of its adoption.

In the subsequent management of the lying-in woman, there are two important points which, instead of securing the attention they merit, are unfortunately too often neglected. I refer to the proper application and retention of the abdominal bandage; and to the strict confinement to the recumbent position for a sufficiently long period after delivery. Whilst it is not necessary always to confine a patient to the bed, *sitting up* should be prohibited, and the sofa insisted upon. The neglect of these precautions is the undoubted source of much subsequent suffering, as is evident by the frequency of prolapsus uteri among the lower classes.

In the present day, fortunately, the duties of the medical attendant are not considered to be ended with the successful termination of labour. In former days, insuperable obstacles presented themselves to the practitioner who attempted to interfere with the routine of the lying-in room. Ignorance, the parent of a thousand quackeries, here held undisputed sway, and by the aid of her ready myrmidons, a body of illiterate, superstitious nurses, actually coerced the doctor into, at least a tacit sanction of practices repugnant even to common sense. So powerful was the hold acquired by this sisterhood, that opposition was either felt to be useless, or dreaded, lest it should evoke resistance detrimental to professional success. Now the case is altered, and questions formerly considered as either too unimportant to merit his atten-



tion, or as pertaining peculiarly to the province of the nurse, are referred to the medical attendant. Foremost amongst these, the question of diet claims his notice; and here, in deciding upon the quantity and quality to prescribe, it must be borne in mind that, as a rule, we have to deal with a woman who, up to the moment of labour setting in, has enjoyed her usual, or even more than her usual health; has pursued her daily avocations, and has indulged in an ordinary substantial diet (as I have before said, the idea of disease we dismiss from our minds.) Well, then, in this state of active health she becomes subjected to a sudden shock, great physical exertion is undergone, considerable hæmorrhage occurs, and there is imminent, in addition, a drain upon the system from the lochial discharges, and a still greater will ensue when the mammary secretion is established. Are we now to cut off the pabulum which has hitherto maintained the normal condition of health, and prepared our patient for enduring the physical and mental strain to which she has been subjected? Shall we, in fact, having garrisoned our fortress, cease to pour in the supplies which shall enable it to defy the siege? Common sense suggests the answer that the diet should be so suited to the patient's requirements, sufficiently substantial without being too stimulating, that the exhausted powers may be rapidly recruited, and the mother enabled to supply the demands of her infant.

It is not necessary to enumerate the precise forms in which such diet should be supplied; every practitioner who adopts the broad principles stated, will decide for himself, according to circumstances, what to give, and what to withhold; and if the treatment here indicated be followed out, we shall have little cause to dread the bugbear of former days, milk fever with abscess of the breast; a liberal diet is the best preventive of such sequelæ, but they are the certain result of deficient nutrition and "slop diet." So far indeed, from its being necessary to restrict our patient to tea and gruel, the very fact that the poor, who by force of circumstances are so restricted, suffer most from inflammation of the breast, may be accepted as a proof of the inadequacy of such diet to meet the requirements of nature.

In concluding these brief observations, I am anxious to disclaim any intention of speaking dogmatically on matters which embrace such diversity of opinion among the leading men of our profession. I shall be satisfied if they elicit the comments of our associates, from which I, for one, may gather assistance in the decision of those weighty questions, which often in the lonely cottage, at the dead of night, demand from the anxious practitioner a prompt reply and unhesitating action. I am, etc.,

WILLIAM LEGGE.

Weylescombe, October 24th, 1864.

#### LETTER FROM J. MORTIMER GRANVILLE, ESQ.

SIR,—The conventional style of reasoning on medical subjects is unfortunately too irregular for the purposes of instruction. The *truth*, to which correspondents are so fond of advertising in the language of ancient Rome, will scarcely be served by the quotation of phrases from a Latin Delectus, or the mere iteration of personal opinions. If anything is to be gained by an argument, the means, as well as the end, must be respected by the disputants. Logical reasoning may produce correct judgments; but the result of false argument must be a fallacy.

The subject of diet and regimen in relation to the parturient state, is far too important to be treated erroneously; and the gentlemen who are favouring your readers with their opinions on the matter, will

confer a public benefit by abandoning the time-honoured method of loose reasoning, and cannot fail to develop the good points of their respective theories by a course which shall place before their readers the premises as well as the inferences of their deduction. Dr. Graily Hewitt affirms a principle of treatment. Mr. Pope, with the aid of certain Roman authors of undoubted antiquity, denies the doctor's affirmative; and Mr. Legge runs to the rescue; yet, after all, the estimate we form of the opinion of these three gentlemen, very much depends on what we happen to know of themselves. Dr. Graily Hewitt's opinion may be worth much, on account of his well known position in the medical world; and that of Mr. Pope not so highly appreciated, because his name is not familiar to the mass of the medical public. But, in spite of appearances, it may chance that Mr. Pope is right, and the doctor a victim to some obstetric delusion. The same principle applies to all discussions; and as the correspondence (if not, occasionally at least, the other parts) of the JOURNAL is not so useful as it might be, on account of this defect in its character, I venture to suggest a change which cannot be less acceptable than beneficial to all who care less for persons and opinions than facts and just inferences.

In accordance with the method I seek to advocate, permit me in conclusion, to submit a few propositions for the consideration of the gentlemen engaged in the discussion referred to.

1. Parturition is not a disease, but the performance of a natural function.

2. The dangers attendant upon it are essentially asthenic.

3. Absorption of poisonous matter is more likely to take place in a depressed, than in a well sustained condition of the nervous and circulatory systems.

4. Irritative fever is a state of reaction following, and dependent upon a previous state of depression.

5. A course of treatment which will prevent the depression and render the absorption less probable is rational in theory, and may be expected to prove good in practice.

6. A course of treatment which does not prevent, but rather favours the depression following labour, and on the principles of human physiology favours absorption, is irrational in theory, and must be defective in practice.

As a mere matter of personal opinion, I may remark that, so strongly does my view of the requirements of the parturient state accord with that taught by Dr. Graily Hewitt that, if it became a question as to the method to be adopted in any particular case, I would decline remaining in attendance whilst the orthodox gruel system was employed. I could give you details of more than two hundred cases treated on this principle, since the commencement of the present year, with uniform success; the average of cases being perfectly recovered in ten days from the day of delivery. For more than four years, I have adopted no other plan; and nothing could induce me to return to the method advocated by Mr. Pope. Physiological science and actual experiment have developed the laws of treatment, which Dr. Graily Hewitt and the President of the Obstetrical Society, Dr. Oldham, have so ably propounded.

I am, etc., J. MORTIMER GRANVILLE.

Bristol, October 1864.

#### LETTER FROM C. SWABY SMITH, ESQ.

SIR,—With much pleasure have I read the letter of Mr. Napper, which appeared in the BRITISH MEDICAL JOURNAL of Saturday last. Most freely do I endorse his opinions upon the treatment of parturient women. Though not a Fellow of the Obstetrical Society, I

have always felt interested in it, and read with pleasure and satisfaction the various discussions that have there taken place; and I may say none with greater pleasure than the remarks made by Dr. Oldham in his introductory address, when assuming the distinguished office of president of that society; and proud am I to have been the pupil of so distinguished an obstetrician. Ever since I first saw his opinions as to the efficacy of a more liberal diet early after confinement, have I adopted that plan, and I may say with almost unexceptional success. Still there are cases which will not allow of such a liberal scale, and you will naturally ask which they are; they are simply those cases in which the patient has neglected a proper attention (which is of paramount importance) to the state of her bowels during her period of pregnancy, which cases, if treated in the liberal manner now advocated, will in all probability be followed by puerperal fever; but, of course, this danger, if taken in time, is to be obviated either by active purgation by the mouth, or by what I have found answer still better, stimulating enemata, and then the liberal diet may with safety be proceeded with. I am, etc.,

C. SWABY SMITH, M.R.C.S.E.

Burghage Writs, October 31st, 1864.

### PERINEAL SECTION *versus* PUNCTURE OF THE BLADDER.

LETTER FROM EDWIN MORRIS, M.D.

SIR,—I was much pleased to find in your JOURNAL of October 15th, that Mr. Paget had replied to my letter, as regards the relative merits of puncture of the bladder and perineal section in impassable stricture.

The question is of such vast importance to the patient, as well as of interest to the surgeon, as to which plan of treatment shall be adopted; assuming that we have reached that point when the distended bladder must be relieved. This controversy will not, I trust, be regretted; and will, I sincerely hope, lead to some practical good for the unfortunate sufferer.

Mr. Paget recommends me to "read again, and with more attention, my cases and remarks published in the JOURNAL of July 2nd, 1859." I beg to state, that I have done so, and with care (and I hope others will do the same); and after much thought, and consideration, find but little to praise and much to condemn.

As Mr. Paget has drawn my attention to his article upon the subject above alluded to, I hope, sir, I may be permitted to criticise freely his remarks; and I hope, ere I close this letter, to induce even Mr. Paget to modify his views with regard to the two methods of treatment, and to retract the following paragraph in his letter: "The section, always viewed as severe, attended with after-peril, and uncertain in practicability and degree of success. The puncture now described, simple, certain, devoid of peril, and free from objection for persons above 60. .... The results of perineal section must be shown far to outweigh in benefit those of puncture, and must very much exceed those of Dr. Morris's present description to change my feeling." We shall see.

It will be necessary to revert to my two cases which, singularly enough, I had under treatment at the time when Mr. Paget's communication appeared, and were at that time wearing elastic gum catheters—one from necessity, the other from preference.

The condition of these two men, Frederick Smith, aged 63, and John Whyley, aged 72, when admitted into the Infirmary (the former on May 24, 1864; the latter, July 26th, 1864), was most deplorable and agonising. The retention had existed some time;

and their danger was imminent. In Whyley's case, the penis was "distended and discoloured"; and, afterwards, a sloughing of a portion of the integuments towards the base of the penis took place, laying bare the muscular structure underneath. This was caused, I have no doubt, by the forcible attempt made to pass an instrument through the stricture. This man appeared in an almost hopeless state of semi-insensibility; and it was imperative that I should at once decide whether I should puncture the bladder or divide the stricture through the perineum. And in adopting the latter course, I hope I shall be thought justified by the surgical profession, as the sequel will show. It is only right that I should add, that I had, throughout the treatment of both cases, the co-operation and able assistance of my partner, Mr. Steven, who is quite willing to endorse all I have stated respecting them. The man, Frederick Smith, left off the use of the gum catheter in August; and on September 26th was discharged cured; able to micturate freely at pleasure, and without any artificial aid whatever. The man's occupation is that of a drover; and I have not seen him since. He promised, whenever he comes into this neighbourhood, to call upon me. The other man, John Whyley, is still in the hospital, but quite cured. The perineal wound has been quite healed; and no catheters have been used for the past three weeks; the ulcer at the base of the penis has closed over. He has become quite robust and healthy-looking; and can retain his urine for any reasonable length of time, and, when necessary, pass it with the greatest freedom. On Saturday last (October 22nd), I passed a No. 8 silver catheter without meeting with the least obstruction. He is ready to leave the sick ward at any time.

With due deference to Mr. Paget, I must still claim for my patients a better state of things than his; and I hope that he will admit that the time has arrived for preferring the state of my patient to that of his. They are both, like his, "freshened in condition, erect, and free in gait"; and—what is far more important in contrasting the two cases—are as well as ever they were, before their unfortunate malady. I cannot imagine a more wretched condition than that of one of Mr. Paget's patients—Mr. N.; who, at the age of 60 years, "submitted to have a well curved trocar introduced above the pubes", for relieving his distended bladder; afterwards, a "gum elastic tube about three inches long," with a silver shield, like that of a bladder-trocar, was introduced, with a "wooden plug made water-tight", and secured round the pelvis by a "thin elastic webbing". And "this has been his only resource for now seventeen years. The tube he changes himself nearly every day." The unfortunate man has been thus deprived of the use of a most important organ; in fact, for seventeen years, the very existence of a penis has been altogether ignored.

Mr. Paget gives another case, related by the late Mr. Norman of Bath; where, after puncturing the bladder above the pubes, "an opening was left through which a female catheter was habitually introduced for micturition. No urine escaped, except when the catheter was passed; nor did a drop ever pass through the urethra. In this course, the patient, an old man, held on smoothly for two or three years."

Are these cases for one moment to be allowed to be placed in juxtaposition for contrast, under parallel circumstances, with those of mine; especially that of John Whyley, aged 72 years, who, under very adverse circumstances, underwent the operation of the perineal section for the cure of his impassable stricture—"hopelessly impermeable"—and who is now perfectly cured, and free from all artificial appliances and disagreeable encumbrances? The case is, in fact,



a great triumph of surgical art—a marvellous recovery.

Mr. Paget admits, with his usual candour, at least one objection which "may possibly weigh against its general adoption" (*i.e.*, puncture); viz., that which relates to seminal matters. He states that, when urine cannot pass, semen cannot; nor can we assume for our present plan, that it would at all restore the function. Mr. Paget does not consider this as an objection in practice; inasmuch as "he would then only lose it a few years, probably very few, earlier than his compeers in age." Indeed! is it not notorious that the desire for, and capability of, intercourse clings to old men with great tenacity? and to deprive them of that solace and satisfaction in their declining years is, to say the least of it, a cruel act. Again, he says, "Indeed, what have we to promise from any other course? Has the result of perineal section been investigated in regard to this point? In what proportion of operations does its groping dissection spare the parts sufficiently to leave this function intact?" No, no, Mr. Paget; you must know, this "groping dissection" is not correct; but that it is a plain-sailing, straight-forward operation, from beginning to end, without fear of emasculating the patient.

I must differ entirely with Mr. Paget, when he states "I believe it will not be long before perineal section is looked back upon as a matter of history; and its performance, when a grooved instrument can be got through the stricture, is stigmatised as a mere flourish of the knife, discreditable to surgery and sound judgment."

I must leave this strongly worded paragraph to the consideration of Mr. Syme, the originator of the perineal section—that masterpiece of surgery, which the highest state of intellect could only have suggested, and the most determined perseverance have carried into practice.

I am, etc.,

EDWIN MORRIS.

Spalding, October 23, 1864.

### A PUZZLING CASE.

LETTER FROM THOMAS INMAN, M.D.

SIR,—In your concluding paragraph, you express the idea that a man who has seen a fall must notice a bruise. Allow me to inform you, as a matter of fact, that what is called "ecchymosis", or the mark of a bruise, rarely if ever appears at the time of the injury. I have known three days elapse ere any discoloration has appeared. This point is important in medico-legal inquiries.

Allow me still further to call your attention to the fact that bruises leave two marks—one on the surface of the skin (points of abrasion or puncture); another in the skin (effusion of blood). The first is seen at once; the second, only after an interval. There is a third appearance, which none but an observant and experienced eye would note; viz., a white-waxy look of the skin, arising from the total absence of blood, the vessels having been forcibly emptied, and possibly broken. It is this form which is followed by the most intense and most tardy ecchymosis. A witness may speak of one of these marks, and be understood in another sense.

I am, etc., THOMAS INMAN.

Liverpool, October 1861.

[We were not ignorant that ecchymosis (one result of a bruise) does not instantaneously follow the injury. As Dr. Inman points out, bruises leave two or more kinds of mark; and for this very reason we employed the general word "bruise", which comprises them all, instead of the more scientific terms

"abrasion", "ecchymosis", "contusion", which indicate a particular description of mark. We may point out, moreover, that it was by no means implied that a man who had seen a fall would necessarily notice a bruise. The point of the paragraph referred to was, that having seen the fall, and having looked for the mark, a man would be more likely to see it than if he had not witnessed the fall, and had no special reason to suspect the existence of any injury. EDITOR.]

### FISTULOUS COMMUNICATION BETWEEN THE BOWEL AND BLADDER.

LETTER FROM GEORGE D. GIBB, M.D.

SIR,—Dr. Henry Goode's rare case of fistulous communication between the bowel and the bladder, published in your last number, I read with very great interest, as a somewhat similar one occurred to myself many years ago, in the person of a young married lady, who passed feculent matter in her urine. There was, however, this difference in her case. The abscess was the result of acute peritonitis, and burst firstly into the bowel, and subsequently into the bladder. Her recovery was good and complete. The details of the case are published in the *Lancet* of April 20th, 1861 (page 384). So far as my acquaintance goes of the literature of the subject, the result is generally fatal, and recovery is the exception.

I am, etc.,

GEORGE D. GIBB.

Portman Street, October 31st, 1864.

## Medical News.

### APPOINTMENTS.

BAZIRE, P. Victor, M.D., appointed Assistant-Physician to the National Hospital for the Paralytic and Epileptic.  
REYNOLDS, J. Russell, M.D., appointed Physician to the National Hospital for the Paralytic and Epileptic.  
\*STEWART, E. H., M.D., appointed Physician to the National Hospital for the Paralytic and Epileptic.

### ARMY.

ASHTON, Staff-Assistant-Surgeon W., M.B., to be Assistant-Surgeon Royal Artillery, *vice* T. Kennedy.  
CHALK, Staff-Assistant-Surgeon I. M., to be Assistant-Surgeon 2nd Foot, *vice* H. S. Lodge, M.B.  
FERGUSON, Staff-Surgeon J., to be Surgeon 15th Foot, *vice* J. Clarke, M.D.  
MARTIN, Sir J. Ronald, C.B., to have the local rank of Inspector-General of Hospitals while holding the office of President of the London Medical Board for the Examination of Officers of Her Majesty's Indian Service.  
PAXTON, Staff-Assistant-Surgeon J., M.D., to be Assistant-Surgeon 50th Foot, *vice* D. Milroy, M.D.  
WEEDS, Assistant-Surgeon D., 10th Hussars, to be Staff-Assistant-Surgeon, *vice* J. Ferguson.

### ROYAL NAVY.

LE GRANDE, Frederick W., Esq., to be Deputy Inspector-General of Hospitals and Fleets on the Retired List.

### VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

HART, W., Esq., to be Honorary Assistant-Surgeon 2nd Surrey A.V.  
LEWELLYN, W. P. J., M.D., to be Surgeon 2nd Surrey A.V.  
WILSON, J. W., M.D., to be Surgeon 3rd Middlesex A.V.

### DEATHS.

BLETCHLY, Edmund, Esq., Surgeon, at 19, Tabernacle Row, on October 29.  
CLUTTERBUCK, On September 9th, at Ghansi, India, age 117 months, Lewis J. E., only child of J. E. Clutterbuck, M.D., Surgeon 1st Royal Highlanders.  
CRAIG, John S., L.R.C.P. Ed., at Stratford-on-Avon, on October 2.  
FALCONER, On October 20th, at Bath, aged 13, Walter W., second son of R. W. Falconer, M.D.  
\*THORPE, George B., Esq., at Staveley, Derbyshire, aged 49, on October 25th.

**MEDICAL MINISTER OF STATE.** Dr. Lanza, a medical man, forms one of the present Italian ministry. He is minister of the Home Department.

**THE EDINBURGH UNIVERSITY CLUB** will hold its second dinner meeting at the Wellington Club, at six o'clock, on Monday, the 7th inst.

**MR. ALFRED SMEE** has issued an address, offering himself as a candidate for the representation in parliament of the city of Rochester.

**THE PROFESSORSHIP OF PRACTICAL ANATOMY** in the Medical School of Trinity College, Dublin, has become vacant by the resignation of Dr. Barton. (*Dublin Medical Press.*)

WE understand that Lord Wodehouse, the new Lord Lieutenant of Ireland, has conferred the office of Surgeon-in-Ordinary on Mr. Butcher. Dr. Hatchell, now Inspector of Lunatic Asylums, occupied the post under the Earl of Carlisle. (*Dublin Medical Press.*)

**UNIVERSITY OF EDINBURGH.** The half-yearly meeting of the General Council (constituency of graduates) of the University of Edinburgh was held on the 28th ult., Sir David Brewster, Principal and Vice-Chancellor, in the chair.

**"DR." HENERY.** The charge against Osterfield Wray *alias* Henery, and Anderson *alias* Wilson, has been again adjourned to Tuesday next. Anderson *alias* Wilson was in a sufficiently recovered state from delirium tremens to be able to be brought up from the House of Detention.

**MR. MITCHELL HENRY**, well known to the profession as once surgeon to the Middlesex Hospital, has issued an address to the electors of Woodstock, and intends to offer himself as a candidate to represent that borough in parliament. Mr. Henry's return would be a great boon to the profession; for he would be, in fact as well in word, a representative of medical knowledge in the House of Commons.

**NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.** The medical staff of this hospital, previously consisting of Drs. Ramskill and Radcliffe, physicians, and Dr. Hughlings Jackson, assistant-physician, has been increased by the appointment of two physicians, Drs. Sieveking and Russell Reynolds; and an assistant-physician, Dr. Victor Bazire.

**SCOUNDRELS.** An officer of the Royal Navy writes to a daily paper: "A set of blackguards, trading under the title of 'surgeons,' have been in the habit, for some time, of sending their filthy publications to officers of ships forming the Channel fleet. I hope the recent exposure of one of these disgusting vagabonds will lead to the discomfiture and ruin of the whole lot. One of their dirty books was lately sent to a married officer in the army, and opened by his wife."

**MILITARY HOSPITALS AT CHATHAM.** A portion of the invalids have been transferred from the garrison hospital to Fort Pitt hospital. Under the new arrangements, Fort Pitt is intended for a hospital for the entire garrison, the other military hospitals being closed. The buildings at Brompton hitherto used as the garrison hospital will be converted into quarters for the troops of the line.

**ENGLISH WEEDS AT THE ANTIPODES.** In New Zealand, our common English weeds or plants are supplanting the native flora. The water-cress of our brooks has become a positive nuisance to the New Zealander; indeed, the rivers of the country threaten to be choked up by the intruder. One stream, called the Avon, is so filled with water-cress that the annual cost of keeping the river free from the weed is said to exceed £300 a year. The stems grow to a length of twelve feet, and a diameter of three-fourths of an inch.

**UNIVERSITY COLLEGE HOSPITAL.** The following legacies are announced, viz., £50 by the late Zadok Aaron Jessel, Esq., £100 by the late Henry Lloyd, Esq., and £5,000 by the late Jacob Stiebel, Esq.

**GLASGOW UNIVERSITY.** The winter session of the Glasgow University was formally opened on Monday at a meeting held in the common hall of the college. The Very Rev. Principal Barclay occupied the chair.

**THE SALE OF HASCHISCH** has been interdicted by the Turkish government, except for purely medicinal purposes. The *Gazette Médicale d'Algérie* wishes for an analogous prohibition in Algeria, where its abuse is carried to an alarming extent.

**QUARTERLY MORTALITY IN ENGLAND.** The deaths in the quarter ending September 30th, were 112,133. The annual rate of mortality for the quarter in England and Wales was 2.139 per cent., against 2.000 as the average. With the exception of the summer of last year, the death-rate was higher than in any previous corresponding season since the cholera summer of 1854. The causes which operated to produce this excess attacked town and country.

**HARVEST HOME AT THE STAFFORD COUNTY LUNATIC ASYLUM.** The annual festivity of "harvest home," lately took place in the grounds of the institution. Between 200 and 300 of the inmates, of both sexes, partook of old English fare. The order and decorum observed was astonishing. After dinner tobacco was served out to those who wished to indulge in a pipe (and the number was by no means small), and a variety of amusements and games was provided.

**ELECTION OF MEDICAL OFFICER OF HEALTH FOR MARYLEBONE.** On Thursday week the election of a medical officer of health for the parish of Marylebone, in the room of the late Dr. Dundas Thomson, took place, and, as was expected, resulted in the appointment of Dr. Whitmore. The ballot between Dr. Stevenson and Dr. Whitmore, the two candidates selected as having the highest numbers at the previous meeting, opened at eleven and closed at one; having been closed, the scrutineers announced the result to be—Dr. Whitmore 81; Dr. Stevenson 15.

**SALE OF CYANIDE OF POTASSIUM.** Suicides by means of cyanide of potassium have of late been so frequent as to suggest to chemists much more caution in retaining this highly poisonous salt. It is true that photography is a very popular art, and electrolytic gilding is occasionally practised by amateurs; but we may recommend chemists only to retail the salt to those personally known to them. By so doing many suicides will no doubt be prevented, and something will also be done to avoid the forced restriction on the sale of such articles which will inevitably be placed if the use of the cyanide for the purpose of suicide should extend. (*Chemical News.*)

**ARMY AND NAVY MEDICAL SERVICES.** The competitive examinations of the army medical service are held at Chelsea, usually in the months of February and August. The candidate is not required to produce any other qualification than his license to practise; but in the naval service a candidate must produce all his certificates. He is examined by Dr. Hooker on Natural History, Botany, Chemistry, and Materia Medica; by Dr. Parkes on Medicine, Therapeutics, Pathology, Pharmacy, and the writing of Prescriptions; by Mr. Hewitt on Surgery and Surgical Appliances; and by Mr. Busk on Anatomy, Physiology, and Comparative Anatomy. For the first two days his examination is a written one; on the third and fourth days he is examined *visu voce*; and on the fifth and sixth days he is tested by the diagnosis of disease at the bedside in the hospital, and by operations on the dead subject. A certain number of can-



didates, whose answering has been satisfactory, but not sufficiently so to entitle them to a place, are offered appointments on the Coast of Africa, at Sierra Leone, Gambia, and Cape Coast Castle. If the candidate accept the appointment, he is sent out at once, without the period of probation to which others are subjected at Netley Hospital. He is allowed to spend a year at home, on full pay, for every year spent in Africa; and the entire period at home and abroad counts as service for pension. The promotion is only too rapid, owing to the dangerous nature of the climate; and we have known the rank of full surgeon reached in five years from the date of appointment as assistant-surgeon. The competitor, who has been so happy as to obtain a place, is obliged to undergo a probation of four months at Netley Hospital, near Southampton, where he is compelled to attend the following lectures—viz., Hygiene, by Dr. Parkes; Pathology, by Dr. Aitken; Military Surgery, by Mr. Longmore; and Tropical Diseases, by Dr. Maclean. The candidates also attend the hospital, to make themselves acquainted with the system of recruiting, and the modes of keeping the army medical returns. They are also called on to make *post mortem* examinations, to operate on the dead body, and pass through laboratory practice on the modes of recognising the qualities and adulterations of food, and on microscopic examination of morbid tissues and of adulterations of food, etc. During this preliminary training, the candidate is understood to be in her Majesty's service; he wears uniform, is under military discipline, and receives pay at the rate of 5s. per day, and 2s. per day for lodging money, if not provided with quarters in the hospital. At the termination of the four months he is again examined in the subjects in which he has been instructed during that period, his marks are added to those obtained by him at the competitive examination, and his position on the list of merit determined by the total. He is then gazetted to his regiment, and enjoys all the rank and honour, pay and privileges of an assistant-surgeon, as provided by the regulations. In proportion as the demand for appointments in the army has decreased, the ardour for those in the navy has augmented. The pay in both services being the same, the expense of living in the army being so much greater, the number of applicants for naval appointments has rapidly increased. The curriculum is in almost all respects the same as that of the army. The examinations are held at Whitehall, but they take place at no stated period, and are frequent or at long intervals, according to the number of candidates presenting themselves. As soon as the list contains eight or ten names the candidates are summoned to London, and are at once examined on Anatomy, Surgery, Medicine, and Chemistry, by the Director-General, and by the Deputy-Inspector of hospitals. The most noteworthy fact in connection with the examination is, the importance attached to a sufficient knowledge of Latin; the candidate is obliged to translate passages from Gregory's *Conspicius*; and unless this part of the examination be satisfactorily passed, the candidate is not permitted to proceed further on the trial of his competency. The successful competitor is not subjected to any probation at Netley Hospital, but is at once appointed as acting assistant-surgeon on his ship, and enjoys from the publication of his "gazette" all the pay, privileges, and advantages of his rank. (*Dublin Medical Press*.)

**GRATUITOUS MEDICAL SERVICES.** In our judgment one of two things should be demanded of all these *quasi* charities;—either that their privileges be confined to paupers, or the professional attendants be remunerated for the time and services rendered those

able to pay; and the voice of the profession at large should be raised against the practice now too frequent, of indiscriminate gratuitous service. The general profession, as well as those who serve, has a clear moral right to the income of which they are thus deprived. Section 9 of Article 5 of the National Code of Medical Ethics, reads as follows. "A wealthy physician should not give advice gratis to the affluent, because his doing so is an injury to his professional brethren. The office of a physician can never be supported as an exclusively beneficent one; and it is defrauding, in some degree, the common funds for its support, when fees are dispensed with, which might be justly claimed." (*American Medical Times*.)

#### OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1 P.M.—Royal London Ophthalmic, 11 A.M.  
TUESDAY....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
SATURDAY....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

#### MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M. General Meeting. Dr. Gibb, "On Throat-Cough." A. Balmanno Squire, M.B., "On Diseases of the Skin caused by the Arcus."—Epidemiological Society, 8 P.M. Address by the President—*Int. Lobotomy*.  
TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Robert Lee, "On the Nerves of the Heart." Dr. Gibb, "On Removal of a Growth from the Epiglottis."—Zoological—Ethnological.  
WEDNESDAY. Microscopical.  
FRIDAY. Astronomical.

#### TO CORRESPONDENTS

\* \* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

AN ASSOCIATE'S opinion quite agrees with our own—that in future an embargo should be laid upon the epistolary lucubrations of the gentleman alluded to.

QUERY.—The Royal College of Surgeons will assuredly not grant its License in Midwifery to any person who is not qualified to practise Surgery.

INTA MEDICAL SERVICE.—A surgeon writes from India: "The medical staff cut here are in arrears with the salaries of S. C. Wood's. Owing to the regimental reductions, there will be next to nothing for them."

D. H.—We regret that we cannot find the paper from which the extract was taken.

THE DAVENPORT BROTHERS.—We really cannot occupy our space and insult the intelligence of our professional brethren by any serious allusion to the legerdemain tricks of these Yankee gents. The only interest which such a tale can have with members of a scientific profession, is the exhibition thereby afforded of some serious fault or gap in the instruction of what are called the "educated" classes.

CORONER AND MEDICAL FEES.—A correspondent writes:—"A few days since, an assistant of mine, who is M.D., M.R.C.S., attended an inquest and made a *post mortem* examination for me; i.e., the summons was made out to me, as the principal, although I knew nothing about it and Dr. — had investigated it and made the examination. The coroner took his evidence, and then refused to give him the fee, because he was not registered, stating that he was legally precluded from so doing. Was he legally precluded from giving the fee? I believe that he is legally warranted in withholding it, as I did not attend the inquest; but he insists that he is legally precluded from giving it. I wish to convince him (if he is wrong) that he was not legally precluded from giving it."

[We have obtained the best opinion to be had on the point referred to, and it is this: "A coroner cannot be legally compelled to pay a non-registered practitioner, as a medical witness. There is certainly no law to prevent him; and in the case of his taking the evidence of a qualified medical man, he breaks the spirit whilst adhering to the letter of the law. In giving evidence, the law does not require that a man should hold any license to practise at all. His evidence must be taken for what it is worth. He can, however, only recompense him as an ordinary witness. In the case of a medical man asking another to make a *post mortem*, or give evidence for him, the coroner can refuse to take the evidence, if he please; but if he takes it, he is bound in honour to pay for it, although he cannot be compelled to do so." EDITOR.]

INTERMITTENT RESPIRATION.—The phenomenon means simply "exhaustion" of the respiratory muscles. It is common on the approach of death; it is common under nausea; it is produced by such poisons as digitalis; it follows or accompanies convulsive attacks, as sighing; it is common amongst delicate females or males. Its analogue is intermittent action of the heart, which it usually accompanies. When any organ acting rhythmically is exhausted, it loses its rhythm. Irregularity then implies exhaustion from one cause or another. The natural deduction is, that "diffusible stimuli" are indicated. Practice endorses the inference. The prognosis in such a case is grave, so long as the symptom lasts. T. I.

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—H. C. Widdash, Esq. (Prest Ashford, 10s. 6d.); R. Davies, Esq. (Dunmow), 5s.; T. A. Stephenson, Esq. (Radford), 5s. Amount previously announced, £91:6. Received at the *Lancet* office, £9:13.

I am, etc.,

ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, November 2nd, 1864.

COMMUNICATIONS have been received from:—Mr. J. Voss Solomon; Dr. W. B. Hay; Dr. J. B. Pitt; Mr. Pope; Dr. Thomas Inman; Dr. H. Hare; Mr. C. S. Smith; Mr. T. Walton; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. RICHARD GRIFFIN; Mr. J. N. RADCLIFFE; Mr. R. B. CARTER; Mr. OLIVER PEMBERTON; Dr. THUDICHUM; THE HONORARY SECRETARIES OF THE HARVEIAN SOCIETY; Dr. GEORGE D. GIBB; THE HONORARY SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; Dr. MORGAN; Dr. KIDD; Dr. R. FOWLER; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. C. RADCLIFFE HALL; Dr. J. THOMPSON; Mr. F. FRY; Mr. G. H. FURBER; AN ASSOCIATE; Dr. F. J. BROWN; Mr. G. D. B. MACCARTHY; Mr. S. WOOD; Mr. GAINE; ANTICACOTHES; and Mr. WHARTON JONES.

### BOOKS RECEIVED.

1. De l'Emploi Therapeutique des Lactates Alcalins dans les Maladies Fonctionnelles de l'Appareil Digestif. Par J. E. Pétrequin. Paris et Lyon: 1864.
2. Quelques Mots sur l'Acide Lactique et les Lactates Alcalins et Ferreux. Par M. Burin du Buisson. Paris et Lyon: 1864.
3. A System of Surgery. Edited by T. Holmes, M.A. Cantab. In Four Volumes. Volume the Fourth. London: 1864.
4. First Help in Accidents. By C. H. Schable, M.D. London: 1864.
5. Dilatation of the Lacteals. Further Observations on the Waxy or Amyloid Form of Bright's Disease. On a Case of Syphilitic Affection of the Liver. By T. G. Stewart, M.D. Edinburgh: 1864.
6. An Address to the Students of St. Bartholomew's Hospital. By G. W. Callender. London: 1864.

ESTABLISHED 1848.

J. Baxter Langley, Professional  
and MEDICAL AGENCY, 50, LINCOLN'S INN FIELDS, W.C.

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PROFESSIONAL AND MEDICAL AGENCY, 50, LINCOLN'S  
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## Original Communications.

### ON THE RECENTLY IMPROVED METHODS OF EXTRACTING IN CASES OF CATARACT.

By CHARLES TAYLOR, M.D., Honorary Surgeon,  
Nottingham Eye Dispensary.

CHARMING as have been the results obtained from ordinary extraction by simply making a flap of one half of the cornea, and successful as the operation has been in restoring sight to thousands of blind persons, the inevitable percentage of failures which has ever attended that method, even in the hands of the most skilful and accomplished surgeons, has always left something still to be desired in this, one of the most brilliant and delicate of surgical operations.

Not only do we find a series of cases where premature escape of the aqueous humour, laceration of the iris, protrusion of the vitreous body, hæmorrhagic effusion, and prolapse, are causes of disaster in the hands of unpractised operators; but there are others also still numerous where, in spite of the most skilful operation and solicitous after treatment, acute suppuration of the cornea, preceded by slight iritis, and coming on soon after the completion of the operation, entails inevitable loss of sight. In cases such as these, the most accomplished operator is perfectly helpless, and can only witness with regret the entire failure of his most sanguine expectations. As might be anticipated, ophthalmic surgeons have, since the introduction of the operation, been endeavouring to diminish the risks attending extraction. Various forms of knife have been employed—convex, concave, and sickle-shaped. The upper, lower, and lateral sections have been adopted, and the general mode of operating varied *ad infinitum*. All this has been done, however, without materially diminishing the average of failures; which, in some cachectic conditions of body, extreme age, marasmus, and certain diseased and deteriorated conditions of the eyeball itself, becomes swelled to so great an extent as to render the operation one of such gravity that many surgeons decline these cases altogether. Certainly, the improved methods now at our disposal may be reckoned as not among the least important additions to ophthalmic science, which has of late years, especially since the introduction of the ophthalmoscope, been so greatly enriched by the labours of our professional brethren in Germany.

My attention was first directed to this subject by the following observation, which occurs in Von Græfe's classic memoir on *Iridectomy*. He says, when speaking of extraction in cases where glaucoma was complicated with cataract, and where iridectomy had been performed for the relief of the former condition: "It is evident that it is not very pleasant to extract under such circumstances, and yet the results are more successful than would *a priori* be expected; and I believe that extensive statistics would show results not inferior to those of extraction under normal conditions." As these were cases essentially of eyes in advanced stages of disease, and consequently in most unfavourable conditions for surgical interference, the success attending the double operation could not fail to occasion surprise. While pondering on this important observation, however, my attention was directed, by the kindness of my friend Mr. Carter of

Stroud, to a pamphlet, published by Albert Mooren, M.D., *On the Diminished Risks of Corneal Suppuration after Extraction of Cataract*; and, as no translation of this paper has yet been published, it will be necessary for me to avail myself largely of the facts therein detailed, in the course of my observations on his method. Mooren was led to conclude that the occurrence of slight iritis was the starting point of all the inflammatory phenomena which led to acute suppuration of the eyeball and consequent loss of sight, and that the inflammation always commenced in that part of the iris compressed during the exit of the lens. He says:

"One is led by these facts to consider whether it be not possible either to prevent the occurrence of iritis in extraction, or at least to deprive this inflammation of its dangerous characters. Through an exact study of my operation cases, I believed myself to have arrived at a solution of this problem. Some years ago, in two cases in which the iris was much pulled in the passage of the lens, I had cut off the injured portion as in iridectomy; and, remarkable to say, no reactionary symptoms followed. In this procedure I saw at that time only an evil, and practised it through extreme necessity; not with any idea of preventing inflammation, but only to guard against prolapse. For a long time I remained in the same view; and until I obtained additional similar experience, I gave the matter no more attention. . . . In March 1859, I had occasion, through the unfortunate result of two extraction-cases, to observe what an extraordinarily important part is played by the iris in the healing of the corneal flap. There came to me a big, fat, corpulent, full-blooded peasant's wife, entering on her sixtieth year, to undergo extraction in both eyes; the removal of the lenses was accomplished without any difficulty. After completing the operation, the idea struck me that this patient, on account of the great plethora of her head, might probably suffer from iritis, and the more as her enormous corpulence forbade her to remain long at rest, and compelled her to spend part of her time sitting upright in bed, even at the very point of applying the bandage. I introduced an iris-hook under the cornea, in order to withdraw and cut off a portion of the iris; on one side the manœuvre was completed; on the other, the pupillary margin slipped from me before I could seize the moment to cut it. In consequence of the pulling which the iris had sustained, this part inflamed with such severity, that on the second day the cornea was already totally infiltrated with pus. The other eye healed without any disturbance, and the patient to this day enjoys with it unimpeachable vision.

"Three days later, the same unpleasant accident occurred to me with another patient. Here, also, the iris slipped from the hook, and the rapidly developed iritis produced likewise destruction of the cornea. I had thus gained the knowledge that the seizure of the iris with a hook was a dangerous manœuvre, from which evil consequences might be expected; just as perfectly as the instrument satisfied every desire when the iris is immediately secured and cut, so extraordinarily dangerous is it, when the membrane slips off again, and is thus exposed to repeated traction. The application of the common iris-forceps, such as the one commonly used in iridectomy, would from time to time entail this consequence, that, in great unsteadiness of the patient, or by strong turning of the eye in an opposite direction, complete dialysis would be produced. In order to render deviation of the eye, and consequent slipping of the iris impossible, it would be necessary to hold the globe with a hooked forceps. But let us think of the extreme danger involved in such a proceeding. Nearly half of the cornea has been separated from its periphery by the section; the lens is removed; the vitreous body

is only held in place by the thin posterior wall of the capsule. How light soever might be the pressure, and on whichever side it came, when the traction of the forceps was felt, bursting of the empty capsule and escape of the vitreous humour would be the first, and most natural result; at all events, to complicate the operation in such a manner for the sake of avoiding inflammation, would double the risks of extraction rather than diminish them. The procedure would be dangerous, and consequently is inadmissible. Another solution of the problem was therefore necessary.

"The first opportunity offered itself in May 1859. A woman, past seventy years of age, with faded wrinkled skin, and of such weakness that she could only walk when supported by a stick, compelled on account of great exhaustion to spend most of her time in bed, presented herself to me for extraction. Under these circumstances, it was evident that the least iritis would be followed by sloughing of the cornea; plainly speaking, the state of things seemed to me so desperate, that I did not undertake to operate without some feeling of repugnance. I determined, therefore, to divide the operation into two parts. Acquainted with the small risk attending iridectomy, I first made this from below. The healing process was completed without disturbance, and the patient was ordered the most strengthening diet. Three weeks later I performed extraction by an inferior flap. I thus had the advantage, first, that in premature escape of the aqueous humour the iris would not be pinched between the lens and the knife; secondly, that the cataract itself had not to be pressed through a narrow pupillary opening. In this way were two conditions obviated, which in the ordinary method of operating greatly promote the occurrence of iritis; as a fact, the fortunate result entirely surpassed my expectations. The healing process went on without any signs of reaction; and, fourteen days later, the eye no longer shewed a trace of vascular injection.

"In the month of June, a second eye was offered to me for extraction, in which the chances of success by the use of the usual operation would have been very small. Encouraged by the favourable result I shortly before obtained, I determined to practise again the same method. This case occurred in a lady of 76, my own aunt. The patient had been blind for several years, and shewed that delicate skin upon the face and hands at which, with reason, all operators become alarmed. This sign may be observed in more than three-fourths of the instances of threatened sloughing of the cornea. First, iridectomy was performed; fourteen days later, extraction. The cornea proved to be extremely thin, and wrinkled itself upon the completion of the section, the centre and the cut edges sinking in; on the third day, the eye was opened. An insidious iritis had developed itself without pain, and had produced grey exudation masses in the pupillary space. The whole treatment consisted in the administration of decoction of cinchona. Three weeks later, all inflammation had subsided; but under its influence the pupil had become in great part closed, and the patient had only a very small amount of vision.

"A long illness that shortly afterwards befell me, did not allow me until autumn to think of opening the pupil by operative means. The patient underwent the renewed iridectomy without any inflammatory reaction. Four weeks later, with  $2\frac{1}{2}$  convex, she read No. 3 of Jäger's test-types; and this lady still enjoys such excellent vision, that at present she occupies nearly all her time in reading and writing. This case proved to me, more than the former had done, that the supervening iritis which, under other circumstances, would have totally destroyed the eye, had been deprived of its dangerous characters.

"Likewise, it seemed established that, by this method,

the occurrence of disturbing processes might be prevented. It remained, therefore, to determine the limits within which it should be preferred. Speaking for myself, I could not but arrive at the feeling, that extraction, as it had heretofore been taught and practised, was no longer to be desired in opposition to my method of diminishing its dangers. *I saw my method, not only as a supplement, but as an absolute necessity in extraction.*"

I have preferred, in the above extract, to give Dr. Mooren's reasons for the adoption of a preliminary iridectomy as nearly as possible in his own words. He does not recommend his operation, however, to the entire exclusion of the ordinary method; but only in cases where, from the state of the patient's health, or the condition of the eyeball itself, the ordinary operation is almost certain to fail. Thus, he always makes a prior iridectomy, in cases of great age, complicated with general debility; in cases of disease likely to interfere with, or prevent, the healing process, such as severe cough, asthma, persistent vomiting, or affections which preclude long maintenance of the recumbent posture; a thin, silky, debilitated state of skin; or such an amount of constitutional cachexia as would lead the surgeon to anticipate disaster as the result of any operation.

The existence of pupillary adhesions, a diseased or deteriorated condition of the lens or eyeball itself, are also indications for his method of operating. Thus, if the pupil be thoroughly dilated with a drop of atropine solution, the lens will readily pass through the pupillary aperture, and there is so much the less indication for a preliminary iridectomy. Again, if the cataract have a small nucleus, surrounded by much cortical matter in coherent masses, the escape of some portions of this soft matter into the anterior chamber is so apt to provoke an insidious iritis, with subsequent suppuration of the globe, that, in this condition of the lens, a careful prior iridectomy is the only safe method of operating. The worse the patient's condition, the longer must the interval between the iridectomy and subsequent extraction be. In Mooren's cases, a fortnight or three weeks only was allowed to elapse; but six weeks is the shortest interval now adopted. I may mention that Mooren's practice, with the exception of Von Gräfe's, is the largest in Prussia, if not in the whole of Germany; he having had 578 operations in 1860, and 622 in 1861.

Since 1859, up to the period of the publication of his pamphlet (1861), Mooren practised his method in every case where the ordinary operation appeared certain to fail, with such brilliant results that he feared the incredulity of his readers; and, instead of contracting his narrative to a simple percentage proportion between successful and unsuccessful cases, thought it necessary to verify his statistics by giving the names and addresses of all the patients operated upon in this manner. Here are one or two average specimens.

"Frau Greis, from Eberfeld. Iridectomy, October 14th. Extraction, October 22nd. Very pasty individual, with thin skin, and very insufficient dilatation of pupil. She is so asthmatic, that she seems every moment on the verge of suffocation, and is always, therefore, in the highest state of agitation. On completing the section, the cornea wrinkled itself very much; the removal of the lens was attended by very great difficulty, both from the unsteadiness of the patient, and also from firm adhesion between the cataract and posterior capsule. Tedious healing. Granulation, with much spasm of the lids. Recovery, with tolerable vision.

"Frau Berger, from Viersen, only fifty years old; but a picture of weakness, decrepitude, and anæmia. The left eye had undergone reclinatio elsewhere,



and the uprisen lens irritated the eye. I attempted its removal. Upon introducing the knife, however, the aqueous humour and the vitreous humour of like consistence trickled forth, and the sclerotic fell into wrinkles. These conditions, together with circumscribed capsular opacity of the right eye, led to the conclusion that the vitreous humour was perfectly fluid in the right eye, also. Iridectomy, Sept. 8th. The cornea wrinkled itself; the effused blood required fourteen days for its absorption. The patient was so feeble as to be kept in bed for three weeks. She left her bed for the first time on the day before the extraction, which was performed on October 1st. Full diet. A secondary cataract remained, and, together with an insidious iritis, produced an obstructed pupil. In the beginning of December, therefore, a second iridectomy was required. Very satisfactory vision. In both the operations, the cornea fell completely; and the patient's condition of marasmus was so extreme, that my assistants, and also Dr. Ruschhaupt, who witnessed the operations each time, earnestly endeavoured to dissuade me from performing them."

Without quoting further from Dr. Mooren, I will now detail two or three cases in which I have performed his operation; which will, I doubt not, be all the more satisfactory, as I shall be able to show you the patients.

CASE I. Ann Allwood, of Mansfield, a feeble, cachectic individual, in her 56th year, consulted me in May last year on account of an amaurotic condition, with partial lenticular opacity of the left eye. On ophthalmoscopic examination, I found the retina extensively diseased; the vitreous body fluid, and crowded with shred-like patches, which floated freely to and fro; and her vision so much impaired that she required a guide in the street. The right eye had been useless for some years; having, in addition to a perfectly fluid vitreous body, indicated by a remarkably tremulous iris, a hard, calcareous cataract. As she had some perception of light with this eye, I thought it possible that she might be benefited by extraction; and, accordingly, proposed the operation. I also considered this an excellent case to test Mooren's method, as the patient's health was very bad, the eyeball extensively diseased, and an ophthalmic surgeon had assured her that any attempt at extraction would be followed by suppuraction of the globe. Iridectomy was performed early in June; extraction three weeks later. The patient recovered without a bad symptom. Ten days after the operation, there was scarcely a trace of vascular injection; and it was only on careful inspection that the fact that she had recently undergone extraction could be ascertained. After the operation, she had increased perception of light, but no useful vision. The ophthalmoscope revealed extensive disease of the retina and vitreous body.

CASE II. Alice Duffield, Nottingham, a decrepid, pasty individual, in her 77th year, with thin wrinkled skin, and so feeble that she had required the support of a stick for some time past, had been in very bad health, and had suffered three slight paralytic attacks. Her medical attendant assured her that she was not fit to undergo the operation. I thought this a good case for Mooren's method; and accordingly performed a superior iridectomy on the left eye early in August last year, extracting a month later. The patient was very unruly; and the cornea was wrinkled and depressed in the centre. The lens was extracted without difficulty. She was perfectly comfortable, and without a bad symptom for five days; when, contrary to orders, she got up, removed the pad, and exposed her eye by looking out of an open window. Acute catarrhal ophthalmia, culminating in a very sharp attack of iritis with closed pupil, was the re-

sult. Three months later, therefore, when the eye was quiet, I performed a second iridectomy, opening up the pupil, and restoring good vision. Eighteen months previously, when she was in much better condition, I performed ordinary extraction on the right eye. There was an escape of fluid vitreous humour, and considerable prolapse of the iris, followed by general iritis, turbidity of the humours, and the establishment of a corneal fistula through which the aqueous humour drained slowly for months. The eye was, however, ultimately saved, after she had undergone considerable pain and discomfort.

CASE III. Josiah Falconbridge, a very feeble patient, wasted by poverty and disease, in his 68th year, was suffering from chronic psoriasis, with patches of ulceration on the skin, and had recently been an inmate for three months of a general hospital on account of chronic disease of the bladder, which necessitated his rising several times each night. He was also afflicted with ingrowing lashes, which had caused a patch of ulceration on the lower half of the cornea of the left eye, which was the site of a hard senile cataract. This was altogether one of the most unfavourable cases for operation that could well be conceived. Iridectomy was performed on July 2nd, 1863. Owing to a very prominent brow and great emaciation, the eyeball (very small and hypermetropic) was so sunken, that I had great difficulty in introducing the iridectomy-hook. Extraction was performed three weeks later. On opening the eye on the seventh day, the corneal surface was covered with pus, the result of severe conjunctivitis, caused apparently by the irritation of the lashes. The wound was quite healed; the cornea perfectly clear. The conjunctivitis yielded in a few days; and the patient recovered with excellent vision.

CASE IV. Mary Rame, a feeble patient, with thin, wrinkled skin, in her 65th year, was much reduced by poverty, confinement, and depression of spirits, the result of blindness caused by hard senile cataracts in both eyes. Iridectomy was performed in the left eye early in August last year; extraction six weeks later. The lens was very large, and surrounded by soft coherent matter, some of which floated into the anterior chamber, and which, owing to her unsteadiness, it was impossible to extract. She did exceedingly well for five days; when, owing to the irritation of the lens-matter or to some unexplained cause (I did not see her after the operation), severe iritis was developed, ending in closed pupil. I have not yet had an opportunity of remedying this defect; but do not doubt that a second iridectomy will restore her excellent sight.

CASE V. Ann Fox, aged 65, with hard senile cataracts in both eyes, was in reduced health, owing to depression and confinement, the consequence of blindness; and very obese, so that she could not maintain the recumbent posture for any length of time. She would probably have done well with the ordinary operation; but, as she was excessively anxious as to the result, I gave her the choice, and she selected the safer procedure by Mooren's method. Iridectomy was performed on the right eye early in August last year; extraction six weeks later. She recovered without the least unfavourable symptom; has excellent distant vision, and reads diamond type.

I found in these cases that the coloboma iridis was completely concealed by the upper lid; that the pupil was about the normal size; that it was influenced by a strong light, dilated by atropine, and contracted by Calabar bean. The patients did not complain of dazzling; and the only inconvenience attending the operation was its division into two parts, separated by a somewhat long interval.

Mooren publishes sixty selected unfavourable cases,

of which the two I have quoted are fair specimens. These cases, he states, would have been lost with certainty by any other proceeding—an opinion confirmed by Dr. Ruschaupt and his two assistants, Drs. Meisner and Josten. The operations were attended by the remarkable result of only two failures. In one of these, when not under the doctor's care, the eyelashes became inverted, and raised the corneal flap; in the other, there was, at the time of the operation, complete retraction of the corneal flap—in itself, tantamount to a local mortification. Prior to the adoption of his method, eleven failures in ninety-seven operations, or more than one in ten, was the average of failures with ordinary cases presumably favourable in the hands of the same operator.

The cases most likely to fail by the ordinary, or indeed any method, are those where the cornea is extremely thin—a condition mostly observed in cachectic and aged individuals; a condition, moreover, which it is impossible to diagnose with certainty prior to the completion of the section. We may always, however, suspect its existence when the skin is extremely fine and thin. There are three degrees of this condition; the first, marked by a central depression of the cornea, often with transverse wrinkling immediately on completing the section; a second, where the shrinking is such as to cause withdrawal of the flap; and a third, where there is more or less positive retraction. This complete retraction implies absolute loss of the elastic properties of the cornea; and, whenever it exists, leads to total destruction as soon as the ordinary reaction attains the height of an inflammatory process.

My experience of Mooren's method is, that there is much less danger of subsequent inflammation; and that, when this does occur, it is robbed of its dangerous properties. The preliminary iridectomy affords a permanently large pupil, through which the capsule of the lens is very readily incised, and through which the lens itself passes with the greatest ease. After the operation, the edges of the corneal flap are most easily replaced, and there is no chance of that *bête noir* of extraction, prolapse, to disturb the healing process. If the inferior section (the one always used by Mooren) be adopted, the remains of the lens are removed more easily; any portions left, too, are less liable to press upon and irritate the iris, when this membrane offers to them a diminished bearing surface.

There are three objections to Mooren's method. The first is, the deformity occasioned by the removal of a portion of the iris; the second, the liability of the patients to unpleasant dazzling through the enlarged pupil; and the third, the inconvenience attendant upon the division of the operation. The first two cease to be objections when the upper section (the one which I have always adopted) is used. The last is indeed a most serious contraindication, and one that must necessarily limit the operation. This is so palpable a fault in Mooren's operation, that in the two other improved methods of extracting to which I have briefly to direct attention (Jacobson's and Schufte's), the iridectomy and extraction are combined. Jacobson makes the iridectomy the last step of extraction, and gets rid of the obvious dangers of manipulating the globe after incision of the cornea, pointed out by Mooren, by doing the whole operation when the patient is profoundly under chloroform. He, like Mooren, by continually inspecting the healing process after ordinary extraction, established the fact that the portion of iris corresponding to the flap, and compressed by the lens in its exit, is that in which inflammation always commences. This is the centre of all risk to the eye; and, to be danger-free, this must be got rid of. He

keeps his patient for twenty-four hours without a large meal, and for some hours without solid food. He pours chloroform on a compress with a wax cloth back; hold it at a little distance, until the fauces and larynx have become accustomed to the vapour; and then moulds its edges (after a fresh supply of chloroform) to the face, so as to admit very little air, and to push anæsthesia rapidly. When the patient is nearly fit for operation, the compress is somewhat removed, and more air given with the last portion of chloroform. The patient being in such a condition that the contact of instruments produces no action whatever of the muscles of the globe or lids, the latter are held apart by an assistant, and Jacobson proceeds to make an inferior flap, with the line of incision not in the transparent tissue, but in the vascular limbus corneæ, so as to get a larger opening for the lens, and to place the wound nearer than usual to the materials for repair. For a large or externally softened lens, he makes his puncture and counter-puncture half a line below the horizontal meridian; for a smaller or hard lens, somewhat lower. This being premised, and also that he selects a knife of a breadth corresponding to the semidiameter of the cornea, he proceeds, sitting on the edge of the bed in a convenient position, to seize the conjunctiva and subconjunctival tissue with toothed forceps, below and to the inner side of the cornea; with the disengaged hand he enters the knife at the junction of the cornea and sclerotic, carries it quickly through and out at a corresponding point, and pushes it gently on with its edge inclined slightly towards the iris, so that nearly all the external wound will be in the conjunctiva. The knife, being carried on as far as convenient, is gently withdrawn, leaving a central isthmus undivided. If the blade be too narrow, this isthmus will contain a bit of cornea; but if it be of right width, it will consist of conjunctiva alone. Von Græfe's fleam-shaped cystotome is then introduced, and the capsule freely opened; and then the isthmus is divided; its corneal portion, if any, with the point of the knife, in the line of the original incision; and its conjunctival portion with scissors, two lines farther down on the globe. The lens is started by digital pressure through the lids, directed in the first instance from above backwards and downwards, so as to make it rotate and present its lower edge at the pupil; and any *débris* are eased out with the scoop in the most delicate conceivable way. The lower segment of iris is then drawn out with proper forceps, and cut off close to the ciliary margin. The conjunctival space and the line of incision are cleared of blood and coagula; and the lids are closed. If the cornea be in right position, Arlt's compress is applied immediately; but if it be depressed, Jacobson waits from five to thirty minutes for a resecretion of aqueous humour to elevate it. The operation being a bloody one, there is a little delay between its stages, on account of conjunctival bleeding obscuring the parts and requiring removal. Between each two stages, the anæsthesia must be noted, and, if necessary, more chloroform given; the lids being, in the meantime, closed and supported by a ball of charpie and gentle pressure. No step must be taken without certainty that it can be completed with passive ocular muscles. If vomiting occur, the lids must be closed, supported by a ball of charpie and the hand; and the patient raised to a sitting posture, to vomit; then laid down again, and more chloroform given. The anæsthesia is to be maintained until after the application of compresses, which are applied in every case to both eyes.

For twenty-four hours after the operation, each patient has the undivided attention of a nurse, who anticipates all his movements, supports his eye if he



should vomit, and so forth. If any pain, or especially any *heat*, be felt in the eye, iced poultices are applied over the compresses, and changed every few minutes for hours together. If this be insufficient to give speedy relief, and if the patient will bear depletion, four leeches are applied in front of the ear, and each replaced by a fresh one as it falls, so as to take blood continuously until benefit is derived. From forty to eighty leeches have been used in this way to a single case; and this treatment is had recourse to promptly, before mischief is allowed to make head. Jacobson does not hesitate to open the eye for inspection on the second day, and, after the third, commences the systematic instillation of atropine, to prevent adhesions between the pupillary margin and the coagula left for absorption after iridectomy. Jacobson claims ninety-eight cures in one hundred operations, presumably ordinary cases. I have not tried his method, as I conceive that chloroform vapour, concentrated to the required extent, must of itself entail some risk, especially in patients whose health is such as to render the ordinary operation inadmissible. Again, I think escape of the vitreous humour would be favoured by the position of the incision; while the excessive attention to minutiae, the risk of vomiting, and the extraordinarily careful nursing required, are all such self-evident contraindications, that I need not dwell upon them. None of these, however, apply to Schuffe's, or more properly Waldau's, method of scooping out grey cataracts—an operation which, first received with caution, afterwards, owing to several failures, viewed with disfavour, is now rising so rapidly in estimation as to threaten, in the words of Mr. Critchett, to supersede the old method of flap-extraction altogether. In this operation, the lids are kept apart by the ordinary wire speculum; the operator then fixes the eye with a pair of forceps; and, with one of Jäger's bent iridectomy-knives, proceeds to incise the cornea close to the sclerotic, so as to form a curved slit from three to four lines in extent. With a hook or forceps, a portion of the iris is then drawn out, and about one-fifth of its extent removed. It is well, in doing this, to leave a slight belt at the ciliary margin, so as to afford support to the vitreous, and prevent its escaping or prolapsing. The capsule of the lens is then freely opened, and any superficial softened matter coaxed out with the scoop of the ordinary curette. Critchett's vectis-spoon is then glided between the posterior surface of the cataract and the hyaloid membrane. As it passes behind the equator of the advancing lens, the handle is slightly sloped backwards; and, when its centre has reached the posterior pole of the lens, with a gentle lever movement it is cautiously lifted into the anterior chamber, and extracted. The greater part of the cataract is removed at once. Any remaining portions, however, must be carefully fished out with the spoon; while the globe is lightly rubbed with the lids from time to time, so as to wash any fragments concealed behind the iris into the pupillary area. Critchett's spoon brings away the cataract, or, at any rate, its firm nuclear portion, unbroken, and does not take up more room than a thin metallic layer. The introduction of this instrument has greatly facilitated the performance of Schuffe's operation, and will render it much more general. It also enables us to deal with all varieties of cataract, however dense. The risks attending this method are, that the hyaloid may be ruptured, and the vitreous allowed to escape. There is also danger of bruising the iris between the cornea and spoon; and also that fragments of the lens may be left in the anterior chamber, probably concealed behind the iris. Any of these accidents may retard the progress of the case, or even seriously compromise the eye. If they are avoided, however, and

there is much less risk of such accidents since the introduction of Mr. Critchett's spoon, there can be no question that the patient's chances with a comparatively small elastic slit in the cornea are far greater than with a large semicircular flap. Scarcely any after-treatment is necessary, and the eye need not even be closed. There are many objections to the old scoop with flat bottom and steep edges, originally used by Schuffe. It was apt to become entangled in the substance of the lens before it had passed behind its posterior surface; to break it up, and push portions into the space behind the iris, where they excited destructive inflammation. Hard senile cataracts also could not thus be removed.

These facts will perhaps account for the ill success which has attended this operation in the hands of many surgeons. Mooren adopted it in thirty-two cases, with the decidedly unfavourable result of losing ten eyes. He also states that other surgeons were similarly unfortunate. A friend of mine performed the operation in two cases—in both the globe suppurated; and an eminent London ophthalmic surgeon informed me that he had tried it in three cases, the eye being lost in each. The only case in which I have performed the operation was one of traumatic cataract, in which, owing to the development of glaucomatous tension, it became necessary to perform iridectomy; and I subsequently extracted the lens with Mr. Critchett's spoon. In spite of the above facts, Schuffe's is just now the operation *par excellence* at Moorfields; and I do not doubt that it will ere long occupy a similar position elsewhere.

I must not omit to mention that linear extraction, with and without iridectomy, is fast superseding the old operation of solution by needles, drilling, and dissection, in a number of cases of fluid and semifluid cataracts. There is no risk of escape of the vitreous humour, collapse of the globe, or hæmorrhagic effusion; and the results are, as Mr. Hart observes, in some respects incomparable. Of the various modifications of this operation, none yield such speedy and charming results, as Mr. Teale's revival of the ancient Persian method of extraction by suction. The operator must first, with two needles, tear up the anterior capsule, so that it may curl back from the area of the pupil, and be lodged behind the iris. Then, opposite the margin of the fully dilated pupil, make an incision in the cornea with a broad needle; through this opening, the suction-curette is introduced, and is gently buried in the opaque lens, which is then extracted by suction. Mr. Krone makes a very useful valve instrument for this purpose; and Mr. Weiss has two—one with a valve, and the other with a mouth-piece. I prefer the latter. Great care is required, to avoid injuring the posterior capsule. This instrument may also be used in cases where extraction by flap is contraindicated, such as, *e. g.*, diabetic cataract. The patient sees after the second or third day; and moderated light may be admitted in forty-eight hours after the operation.

In conclusion, I may perhaps be permitted to mention that I have endeavoured to simplify the ordinary operation of extraction by semicircular flap, by carefully dividing the capsule with a fine cutting needle, as the first step of the operation, when the pupil was fully dilated with atropine; extracting as soon as the few drops of aqueous evacuated had been resecreted. I have thus avoided what always appears to me a difficult and dangerous part of the operation—incising the capsule when one-half of the cornea is converted into a flap; the patient's eye rolling in all directions; the iris in contact with the cornea; and the pupil, in spite of atropine, reduced to a point. The risks of pressure in this condition almost preclude the possibility of fixing the eye; and the difficulties of incising

the capsule freely and carefully, the dangers of scratching the iris, obscuring the operation with blood, oppressing the eye, breaking up the lens, and thus exciting the first steps of what may prove a destructive inflammatory process, are self-evident.

Since the above was written, I have had further opportunities of testing both Schufte's and Mooren's operations, with excellent results. I may also mention that, at the recent Heidelberg Ophthalmological Congress, Professor Jacobson stated that, in 140 operations, he had only lost three eyes. In one remarkable case, a patient, aged 85, was kept narcotised for three hours, and inhaled upwards of six ounces of chloroform. In an animated discussion which ensued, concerning various points connected with extraction, the general feeling appeared to be in favour of iridectomy only in special cases such as I have pointed out above. Von Gräfe also expressed an opinion contrary to the generally received notion, that of two cataracts the less ripe one afforded the best results from operation. Mr. Critchett, at this meeting, also stated that he had met with such success with Schufte's method and his own modified spoon, that he now never thought of performing the usual flap operation.

### PROTRUSION OF THE EYEBALL: BEING THE SUBSTANCE OF A LECTURE.

By HAYNES WALTON, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

#### PROTRUSION OF THE EYEBALL.

PROTRUSION of the eyeball arises from several mechanical causes, which are very dissimilar in their kind, and in each there is an amount of detail that could never be supposed by any one not much engaged in ophthalmic practice.

Every one does not know the difference between a protruded eyeball and an enlarged one, and an error is very excusable in the inexperienced. Congenital enlargement has been met with, but very rarely; and, while the proportions of all parts remain the same, the greater absolute magnitude is very apparent. Enlargement from disease always carries the evidence of diseased action, if not in the altered form of the cornea, or in the increased size of the chambers of the eye from greater aqueous secretion, certainly in the bulging and altered colour of the sclerótica. In mere protrusion of the eye without distinction of causes, the upper eyelid covers the eye, and hangs down lower than usual, is more or less paralytic and puffed, with its surface generally of a dusky red colour, and traversed by large veins. On the other hand, in actual enlargement the eye is remarkably uncovered, and presents a staring appearance, while the upper eyelid is merely pushed forward and retained in that position, but is in other respects unchanged.

For the sake of convenience, I shall arrange the causes that thrust the eye out, under those that exist within the orbit, and those that are external to it. It occurs to me to remark that, in no other subject in the range of ophthalmology is the knowledge of anatomy and surgery so needed, alike for diagnosis and for treatment. He must be a well educated and practical surgeon, accustomed to surgical operations in general, who is justified to undertake all the instances of disease that should come under this classification. It is here that the limited province of the

"oculist" of old is so apparent. First, then, of causes within the orbit.

*Venous Congestion.* Under this head I venture to place the projecting eyeballs of the anæmic person. Different opinions still prevail about the origin of it. However, I believe in the cause assigned.

Few persons can have failed to notice in some females, for the most part pale, more or less prominent eyes, which are usually rolled about in a vague and hysterical manner, especially while speaking. There are marked degrees of the prominence. Sometimes you are attracted by a peculiarity merely, and you look twice before you are sure what is wrong; and sometimes the prominence horrifies you at a glance, and disagreeable enough it is then. The eyelids are generally puffy, and the conjunctiva reddened, and the pupils dilated. Males are not exempt from the disease; but so seldom does it occur in them, that I have never met with an example.

Associated with protruding eyeballs is enlargement of the thyroid gland; not always, it is true, but nearly always. I have not seen it absent, and the increase seems due to the simple enlargement of the glandular structure. In a single case only that I find on record, was the goitre of the cystic variety; and here it was very large.

There is generally some heart-disturbance, or, more correctly, disturbance of the circulation. The cardiac impulse is great; the sounds are loud and audible over the entire chest; and in the large vessels a systolic venous murmur is perceptible. It is difficult to judge of the natural pulse, as there is such susceptibility to excitement, that the asking of a few questions produces emotion.

My colleague, Mr. R. Taylor, has published an analysis of twenty-five cases, collected from his own practice and that of others. Of these, twenty were females and four males; of one, the sex is not mentioned, but from the context, the patient appears to have been a male. Three deaths occurred, in each instance in males. In two, there was a *post mortem* examination. Both of these had long suffered from extensive organic disease. In one, related by Sir Henry Marsh, there was considerable dilatation with hypertrophy, chiefly of the left side of the heart, and some amount of valvular disease, chiefly of the right. The right internal jugular vein was very much dilated. In the second, detailed by Dr. Begbie, the heart was large and soft, and flaccid; all the cavities, but especially the ventricles, were dilated; the valves were larger than usual, having accommodated themselves to the increased size of the cavities, but they were otherwise normal. The internal jugular veins were much dilated.

As a rule, however, it does not appear that organic disease of the heart is at all necessary to the production of this peculiar condition of the eyeball. The palpitation, which is invariably complained of, is due to anæmia. This, in the few instances in which the affection occurs in males, may result from extensive disease of the internal organs, from extensive and long continued loss of blood from piles, or from any other cause productive of destruction of the red corpuscles. In females, the starting point of the disease is almost invariably some form of exhausting discharge in connection with the uterine organs.

I cannot say that the impairment of sight is a consequence of this affection. It has never existed in any of the cases that I have so examined; in fact, there is no disease of the eyeball proper.

Of the actual nature of the pathological change in the orbit causing the protrusion, we are certainly ignorant so far as demonstration goes. It has been attributed to inflammatory swelling of the orbital contents, not sufficiently active to produce suppura-



tion, or to cause effusion into the orbital cellular texture; and to loss of tonicity in the orbital muscles, so that the globes, as it were, drop forwards. The last is, perhaps, the least likely of these unlikely things. There is not any loss of voluntary power, which I think would be inevitable, were there loss of tonicity on the orbital muscles; and the freest movement of the eyes may be combined with the greatest protrusion. Again, in the most debilitating diseases, with perfect muscular prostration, the eyeballs do not protrude.

I am inclined to attribute the protrusion to congestion of the deep-seated veins of the orbit, which I think offers a better explanation than any other of the variable amount of the exophthalmia, and of the readiness with which the eyeballs can be replaced by gentle pressure. Mr. Taylor, adopting Dr. Marshall Hall's views as to the spasmodic contraction of the muscles of the neck in paroxysmal and convulsive diseases, suggests that this may be the cause of the impeded return of the blood from the head; and this view is supported by the fact that, in the only two *post mortem* examinations that have been made, the internal jugular veins were found to be much dilated, as though there had long been some cause of obstruction at the lower part of their course; and, as in neither case was there any solid growth which could have impeded the circulation, it is not unreasonable to suppose that the obstacle was due to muscular spasm. But if this were true, how is it that there is no cerebral congestion, when the return of the blood from the brain is so checked?

It has been supposed that, if venous obstruction be the cause of the protrusion, to enlargement of the thyroid gland must the obstruction be attributed. The reader must decide how much this is worth, when he is told that considerable protrusion of the eyes is met with when there is not any perceptible thyroidal swelling.

From what has been said as to the nature of this disease, it will be obvious that the treatment must be directed towards overcoming the exciting cause of the anæmia, which, in the great majority of instances, depends upon uterine disorder. In addition to the special means which may be adopted for this purpose, pure air, nutritious food, and some preparation of iron will be invariably found useful; and those who believe its efficacy, may apply iodine locally over the thyroid gland. I have not seen complete recovery in any case, although several are recorded; but I have met with considerable amelioration; and in all that I have treated, improvement has followed the steady employment of the means I suggest.

**Abscess.** An abscess may form within the ocular tunic, and the symptoms would be protrusion of the eyeball, and pointing or swelling externally between it and the eyelid.

Pus may be deposited in the orbital cavity without the ocular tunic, and whether it be acute, subacute, or chronic suppuration, the physical characters will be the same; namely, the bulging of the orbital portion of the eyelid corresponding to the seat of the suppuration. The formation of pus is, according to my experience, a common orbital affection; and when, with protrusion, there are the usual constitutional symptoms attendant on abscess—the pain, with or without movement of the globe, the redness and puffiness of the eyelid, and the throbbing—we should early endeavour to discover the deposit by an exploratory puncture, made, if practicable, within the eyelids, in the probable direction of the abscess.

**Inflammation of the Orbital Areolar Tissue, Idiopathic and Traumatic.** With the protrusion from this cause, there is always much swelling and redness of the conjunctiva—chemosis, as it is called. As an idio-

pathic affection in various stages, it is not uncommon. It would not answer any practical end to notice in detail the degrees of chemosis that occur; it is enough to say that in the worst cases it stands out as a vascular tumour, and thrusts the eyelids completely aside. It may be limited in extent, and confined to the upper portion of the conjunctiva. As in very slight cases there is but little protrusion of the eyeball, it may be the only objective symptom, and it is always the most marked one. There are rarely absent the pain and the constitutional disturbance.

The traumatic variety is that most frequently met with. It occurs after severe blows about the temples, or on the margin of the orbit. Of course, all the contents of this cavity are always more or less involved. With the protrusion, the eyeball is generally restricted in its movements; sometimes it is motionless. I have been surprised to find the vision affected in all the severe cases that have come under my notice; and in all that I have been able to watch, it has never been restored.

The treatment consists in rest, leeching, or cupping at the temple, and incisions into the chemosis. It is decidedly wrong to attempt to press back the swollen conjunctiva by pulling the eyelid over it and applying a compress, as the eyelid is apt to suffer, while the disease is not thereby arrested; and it is equally improper to excise any part of the membrane, as I have seen done, for contractions follow, and entropion is likely to ensue. It is not necessary to dwell on general treatment.

A very rare form of this kind of protrusion is hypertrophy of the orbital areolar tissue, just as occurs in elephantiasis. In the only case I have met with, there was no loss of ocular movements. The conjunctivæ were highly injected, of a coarser structure than natural, and bolstered out around their ocular attachments by the posterior swellings, which were dense and doughy. Vision was perfect. There was much pain. I lost sight of the patient. I learn from the few cases which are recorded, that the disease is progressive, and the conjunctiva becoming dry and cuticular, the cornea gives way by slough or ulceration, and the eyeballs collapse. Very severe pain had induced the surgeons to resort to extirpation.

[To be continued.]

## NOTES ON HERNIA.

By JOHN THOMPSON, M.D., F.R.C.S., Bideford.

**UMBILICAL hernia** occurs with such frequency in infancy, that it might, without impropriety, be termed "infantile hernia". It is sometimes congenital, but most frequently first makes its appearance some months after birth, when the muscular movements of the abdomen and lower extremities become forcible. Probably, in most cases the umbilical aperture has not been thoroughly contracted, and an expansion rather than rupture of tissue takes place. I have been struck with the comparative rarity of the complaint after the first year, which is explained on the supposition that the orifice of the umbilicus is then fully occluded.

The appearance of this hernia in infancy is peculiar, presenting a protrusion like a filbert or walnut, seldom exceeding the latter in size, except it be congenital; its delicate softness and elasticity on touch exceed these properties in the finest caoutchouc manufactured. It is not often met with in the adult; but when it occurs, is generally in females who have borne many children, and are past the middle period of life. Its size may then vary from an orange to a

melon; and on handling, a peculiar boggy elastic feeling is communicated. An impulse is perceived in each variety of this hernia on the patient coughing or otherwise making forced expiration. I have never read of any other affection simulating this disease; and the following case, as affording an instance, may therefore interest.

A child, about five or six years of age, had suffered from fever, believed to be typhoid; but, during the convalescence, a small tumour appeared at the umbilicus, accompanied with pain, tenderness on pressure of the abdomen, and sickness.

I found, on being called in, a protrusion at the umbilicus exactly resembling umbilical hernia; it could not be returned, and was accompanied with great tenderness of the abdomen, pain, sickness, and constipation. It looked to me a case of strangulated umbilical hernia; and, as the objective and subjective symptoms were so unfavourable, relief by operation seemed a forlorn hope. In no long time, the tumour became discoloured, gangrenous, and sloughy; and within a few days from its first appearance, gave way; but, instead of stercus, there issued pus, and this in large quantity, without admixture. The case was now explained to be abscess bursting at the umbilicus; and my fears respecting artificial anus or fæcal fistula were dissipated, as no connection with the intestine had been formed. Pus continued to issue from the opening for two or three weeks; it then ceased; the child's health became restored; he grew well; and is now a robust adult.

I believe the case was one of secondary abdominal cellulitis following fever. I have found this externally in the sheath of the rectus; and there seems no reason why it might not occur within the abdominal walls, and probably in the fascia propria; that it was not glandular abscess, seems clear from the subsequent history of the patient.

It is generally recommended to treat simple reducible umbilical hernia in the child by applying compresses of wood, lead, or lint, kept in place by plasters or bandages; or by elastic bandages with conical projections of India-rubber, or balls inflated with air, to make pressure at the umbilicus; the whole of which I deem to be very unsatisfactory. As many months, or even a year or two, may be necessary for the cure, the employment of plasters for such periods on the delicate skin of the infant, I hold to be hardly possible, reflecting on the irritation and filth which must occur, and, moreover, that the warmth of the child's skin in this situation is continually loosening the most adhesive preparation. Ordinary bandages will shift position with the multitudinous movements of the child, notwithstanding the greatest care in their application. The wide elastic bandage, with a cone to press on the umbilicus, will sometimes fit and keep in position, but as frequently it will not; it is questionable, however, whether it be advisable to have conical pressure exerted in this disease, lest it retard the contraction of the umbilical aperture. Another objection to the elastic bandage is, that it will not wash; a matter of consequence where an article is required to be worn on the body of a young child for months, and even years. Feeling these objections, I designed a little apparatus, which I have recommended to my patients for a great many years, and which I will briefly describe.

An abdominal support is to be made of two layers of thick calico; it is to be open behind, where some strings or a lace should be placed; the body must have several cords of stout bobbin drawn between the layers from top to bottom, to prevent folding; and, in the part which covers the umbilicus, a pocket of about two and a half inches square, opening in-

wards, is to be formed, which is to receive a square of gutta percha, about the thickness of moderately stout tapping leather, with the edges pared or rounded by a file; a few stitches may then be made to keep the pocket closed. There should be shoulder- and thigh-straps to keep it in place; and it then may be worn either on the outside or within the child's linen. The warmth of the abdomen moulds the gutta percha into shape, which thus effectually covers the umbilicus, and repels the hernial protrusion. It is well to have at least two abdominal supports of this kind for each patient; a soiled article can thus be replaced by a clean one, the gutta percha being removed from the one to the other. In this way, the case is managed effectively, and with due attention to comfort and cleanliness.

Obstruction, or strangulation of this hernia, may occur in the adult, as I have myself seen; but in respect to infantile umbilical hernia, I never saw, heard, or read, of a case of strangulation. A very large proportion of the cases are never placed under professional treatment; and being left to nature, with the assistance of the support afforded by the usual dress of the infant, do well. I knew a practitioner of large experience who left these cases to the care of the parents, with the assurance that they would be cured, and no untoward results were known to follow. The assistance of the surgeon may, therefore, be rather an aid than a necessity—valuable in expediting, rather than ensuring, the recovery of the patient.

## DISLOCATION OF THE HEAD OF THE RADIUS.

By HENRY HARE, M.D., Great Baddow.

The following case, which occurred in my practice on September 28th, may be considered of interest.

A boy, about 10 years of age, was thrown from a donkey, pitching on his hand. When he came to my surgery, I found the left arm hanging down by his side; the hand being in a state of pronation. I could easily bend the forearm upon the arm, and also extend it fully; and that without giving pain. I could effect supination and pronation, with the infliction of little uneasiness. The head of the radius could be felt on the outside of the external condyle of the humerus. It was perceived and felt to move under the finger on effecting supination and pronation. The ulna was normal in its position; and without fracture. There was no fracture of the radius. The appearance of the forearm that struck me most, was that of a depression behind, beneath the olecranon, along the margin of the ulna, making the whole of that bone prominent, brought out, as it were, in relief, when the hand was in a state of pronation. The tendon of the biceps muscle felt somewhat tense. The depression appeared less, when the hand was put in the state of supination; but did not disappear altogether. I diagnosed dislocation of the head of the radius outwards.

I made an unsuccessful attempt at reduction by extension; grasping the boy's hand with my right, and his arm with my left hand. I afterwards put my knee in the bend of the elbow, and flexed the forearm; the head of the radius immediately returned to its normal position with a snap.

When I saw the boy next morning, the arm appeared quite normal, with the exception that behind, the margin of the ulna remained somewhat prominent; and there was a slight appearance of depression (a muscular effect, I imagine) about the middle, along the margin of the ulna.



# Transactions of Branches.

## BATH AND BRISTOL BRANCH.

### DEATH DURING THE INHALATION OF CHLOROFORM.

By CHARLES GAINÉ, Esq., Bath.

[Read Oct. 17th, 1864.]

JOHN DOWLING, aged 15 (a twin), was admitted into the Bath United Hospital, August 27th, 1864, with a very bad talipes varus of the left foot, which conservative means had failed to benefit.

Ulceration of the bearing point of the foot having set in, it was decided that amputation, and an artificial limb, would be the most efficacious method of remedying this state of things. The boy and his friends were particularly anxious that the operation should be done, and expressed a wish that chloroform should be administered to him; the boy particularly urging it.

I was requested by Mr. Gore to administer it to him. Before commencing the inhalation, I examined the outward formation of the patient, which, with the exception of some slight malformation of the walls of the chest (which will be subsequently described), was very good. The head was large, and the facial expression indicative of great intelligence. I made a careful examination of the heart-sounds; which were, as far as auscultation could guide me, quite normal. I then proceeded to administer the chloroform on a small napkin (the ordinary mode of administering it at this hospital). It is my usual custom to commence with a small quantity (ten or fifteen minims at a time), held at a distance of an inch or two from the nostrils or mouth; this to be repeated, at short intervals, until anæsthesia is produced.

There was very little excitement apparent, though the heart's action, for the first minute or so after commencing the inhalation, was slightly increased; but the tone and character of the impulse were quite normal. Respiration was also natural; the eye was steady, and the pupils of ordinary size. This temporary acceleration of pulse having passed, it continued steady (about 76) until the operation was commenced. The time occupied, from beginning the inhalation to the commencement of the operation, was from ten to twelve minutes, and the quantity of chloroform used was about three drachms, by measure.

During this time, the patient was quite composed; and inhaled the chloroform without its producing any of the phenomena presented in most ordinary cases, and which are indicative of transition from stage to stage towards anæsthesia. The eye remained sensible to touch, and the pupil unchanged, until within ten or fifteen seconds prior to the commencement of the operation; it then contracted slightly. The muscles were relaxed; the pulse and respiration remained unchanged.

Mr. Gore now commenced the operation; and, simultaneously with the entrance of the knife, the boy made two strong convulsive starts, and screamed out, clearly indicating that anæsthesia was not complete; and almost synchronously with the second spasm, the heart's action suddenly failed. I immediately called Mr. Soden's attention (who was assisting at the operation) to the state of the pulse; and restorative means were immediately commenced, to endeavour to resuscitate him. The means used were, cold affusion; ammonia; drawing forward of the tongue; pressure and counterpressure on the chest, to imitate the respiratory movements; and the use of the galvanic

battery, which produced marked action of the respiratory muscles of the chest, neck, and face. These measures were persevered with for some time; and though there were two or three convulsive respiratory efforts, they proved but illusory, and life may virtually be said to have ceased when the heart failed. I may here remark that, after the second muscular spasm, the pupils became enormously dilated, and maintained that condition to the last. It may, also, be worthy of special notice that, from first to last, there was no stertorous breathing.

POST MORTEM EXAMINATION, twenty-four hours after death. The body was well formed, with the exception of the left wall of the chest, which was somewhat deformed by the sterno-costal cartilages overlapping the sternum. This was, no doubt, occasioned by the cartilages accommodating themselves to the position which the body assumed consequent upon the talipes. The cartilages, more particularly of the seventh, eighth, and ninth ribs, were bent at a much more acute angle than the corresponding ones of the right side, and were also more dense and difficult to sever. Notwithstanding this malformation, the capacity of the chest was not diminished.

On removing the breast-plate, the parietal and intimate pleurae were found adherent in small patches, more particularly on the right side. The pericardium and endocardium were healthy. The heart was somewhat small, but not abnormally so. The right ventricle was dilated, and filled with dark-coloured fluid blood. The left ventricle contained very little blood; but this was of the same dark hue and consistence as that found in the right. The left auricle and pulmonary artery were filled with blood. The valves were healthy. Microscopic investigation of the muscular fibres of the heart failed to discover any oil-globules.

The lungs were healthy, but congested, especially the lower part of the left; but this may probably be accounted for in intensity by *post mortem* gravitation; as the upper part of each lung was crepitant, though somewhat darker in colour than usual when healthy. The bronchial and pulmonary vessels of the lower part of each lung were gorged with blood. The larynx and trachea were healthy; also, the liver and spleen. The kidneys were both lobulated, nearly, though not to the same extent, as in the fetal condition. The stomach and other abdominal viscera were healthy. The bladder was empty.

The dura mater was healthy; the sinuses contained little blood. The pia mater was natural in appearance. The arachnoid was opaque in patches, especially on each side of the vertex, corresponding with the glandulæ Pacchioni. There was no evidence of tubercle. There was subarachnoidal effusion of a small quantity of semi-opaque fluid. The brain was very large, but apparently healthy; weighing 1726 French grammes, or 60.89 ounces avoirdupois.\* The convolutions were large, and prominently defined. There was no fluid in either ventricle.

The kidneys were both, as I have said, lobulated. This may be considered as an evidence of imperfect development; and may be viewed in that light, as having some relation with the congenital crippling and want of development of the limb.

On the other hand, the very marked development

\* Nothing very definite has resulted from inquiries instituted with regard to the natural capacity of the boy. Admitting that he was of a very good constitution, and that his intellect was certainly above the average in his station of life. But nothing very extraordinary is established to correspond with the unusual size and weight of brain.

[Since the paper was read, Mr. Gore has ascertained that the boy possessed a remarkable amount of natural talent, he was a good arithmetician and mechanic; and, at school, was far in advance of other boys of his age in general knowledge.]

of the brain stands in contradiction to the supposition advocated by Tiedemann (*Zeitschrift für Physiologie*, vol. iii, p. 4, 1829) and others, "that a primitive deficiency in the development of the nervous system is a determining element in the causative production of monstrosities by defect of limb, etc."

No opportunity offered of ascertaining the condition of the urine after his unexpected death. But, among other precautions to take in doubtful cases before administering chloroform, we may now add, perhaps, that an examination of the urine should be one. That a disordered condition of the blood in this relation may readily produce important and unexpected consequences, is well shown by the extraordinary rapidity with which ptialism, and all the other effects of mercury, are produced in cases of albuminuria.

I have briefly recorded the leading phenomena of this remarkable case, as presented during life; also the *post mortem* appearance of all the important structures of the body; and I think it will be shown by the latter evidence, that there was no apparent organic disease that could account for death. It will be then to consider how far death may be said to be attributable to the inhalation of chloroform. And, if so, in what manner did this agent cause death? The quantity used was below the average, and the time occupied in inhalation unusually long. The absence of all the ordinary signs of transition from one stage to another, towards producing anæsthesia, is also remarkable, and is deserving of special notice. I have good reasons for calling attention to this; for, in more than one case of the kind which I have seen, and in which this apparent tolerance of the agent was noticeable, there was the greatest difficulty in rousing the patients from their lethargy; and at the same time they were *never* insensible to pain. The chloroform, instead of acting as an anæsthetic agent, appeared to act as a subtle poison, something similar in effect to a large dose of opium.

Inquiring physiologically into the cause of death in this instance, we must endeavour to show as clearly as possible in what manner (if death be attributable to the inhalation of chloroform) the agent acted so as to kill, and what condition of body during life renders it unsafe to administer it. *Firstly*: Was death caused by its paralyzing influence on the heart? *Secondly*: Did it act as a direct poison on the blood? *Thirdly*: Was death the result of shock while the patient was in an imperfect state of anæsthesia? and, if so, how far may this be attributed to the influence of chloroform? All the phenomena carefully weighed, it would be difficult to assign the cause of death to any one of these, without taking into consideration the influence of the whole. In the first place, what caused the sudden paralysis of the heart? Secondly, what produced the thin, dark, fluid state of blood throughout the body, apparently utterly deprived of fibrine? Thirdly: Would death have occurred from the shock of the operation, had chloroform not been administered? I shall not attempt to theorise myself as to the immediate cause of death, as my object in bringing forward this case was simply to place the leading facts before the members of this Association, in the hope that discussion may elicit some hint which may in future cases prove of some useful practical value.

I will conclude by reading a letter from Dr. Richardson, of Hinde Street, London, in reply to my inquiry in reference to the cause of the dark and fluid blood after death.

"MY DEAR SIR,—The blood is usually found to be fluid after death from chloroform. Not that chloroform in any way acts on the blood to prevent coagulation, but because, from the mode of death, the blood is left closely shut up in the circulation. Usu-

ally, indeed always, when the blood was normal before administration, coagulation takes place directly the blood is let out from the body. I have long, however, been of opinion that there are conditions of great fluidity of blood in which the effects of chloroform are very much intensified. It is probable that, in your case, the blood was abnormally fluid at the time of the operation; that it did not support the muscular power fully at its best; and that, absorbing the chloroform, such power as it did exhibit was sacrificed. This is the only light I can throw on the affair."

[A very interesting discussion followed the reading of the paper, in which the President (Dr. Falconer), Dr. Marshall, Dr. Herapath, Dr. Davey, Mr. Prichard, Mr. Mitchell Clarke, and others, took a part. The general opinion was, that the patient died from shock, in which it was doubtful if chloroform exerted any influence.]

## Reviews and Notices.

A TREATISE ON PHARMACY: designed as a Text-book for the Student, and as a Guide for the Physician and Pharmaceutist. Containing the Official and many Unofficial Formulas, and numerous Examples of Extemporaneous Prescriptions. By EDWARD PARRISH, Graduate in Pharmacy; Member of the Philadelphia College of Pharmacy; etc. Third Edition, thoroughly revised, with important Additions. With 238 Illustrations. Pp. 850. Philadelphia: 1864.

WE have in this able and elaborate work a fair exposition of pharmaceutical science as it exists in the United States; and it shows that our transatlantic friends have given the subject most elaborate consideration, and have brought their art to a degree of perfection which, we believe, is scarcely to be surpassed anywhere. The book is, of course, of more direct value to the medicine-maker than to the physician; yet has Mr. PARRISH not failed to introduce matter in which the prescriber is quite as much interested as the compounder of remedies.

Without further preface, we will state that the work is divided into five parts, with an appendix. The first part is Preliminary, and contains chapters on Dispensary Furniture and Implements, the United States *Pharmacopœia*, and Weights and Measures and Specific Gravity. The second part is headed Galenical Pharmacy; the third, Inorganic Pharmaceutical Chemistry; the fourth, Pharmacy in its Relations to Organic Chemistry; and the fifth, Extemporaneous Pharmacy. The Appendix contains remarks on the Management of a Sick Chamber; Articles of Diet for the Sick and Convalescent; Estimates of Outfits; and Recipes for some of the more important Popular Medicines.

In the chapter on the *United States Pharmacopœia*, Mr. Parrish gives an interesting sketch of the history of that work. Up to the year 1818, British and European pharmacopœias had been used in America; but, in the year just named, a plan for an American pharmacopœia was first proposed, at the suggestion of Dr. L. Spalding, by the New York State Medical Society, and was carried out in 1820 by a convention appointed for the purpose. Since that period, it has decennially undergone revision, in which task a very



large share has been borne by a gentleman who is well known in this country as occupying the highest position among American physicians—Dr. George B. Wood of Philadelphia.

As a companion to the *Pharmacopœia*, Dr. Wood, with Dr. Bache, brought out in 1831 a *Dispensatory*. The relative position of these two works is thus defined by Mr. Parrish.

"Every physician who practises pharmacy, as most country practitioners do, and every druggist and apothecary, should possess a copy of each of these works; the *Pharmacopœia* for use as a guide-book in making officinal preparations, and the *Dispensatory* for reference as an encyclopædia of materia medica, therapeutics, and pharmacy."

In the United States *Pharmacopœia*, the English language alone has been used since 1840—the English and Latin languages having both been used in previous editions; the Latin names, however, of the medicines and preparations are still retained. In this respect, the work resembles the *British Pharmacopœia*; and also in the fact that the contents of the work—which consists of two divisions—Materia Medica and Preparations—are arranged alphabetically. A further resemblance may be found in the nomenclature adopted; the principle of the compilers being to use simple, well known, and readily intelligible names, rather than to follow the changes introduced in the progress of chemical or botanical science. Be it understood, that the *British Pharmacopœia* had not appeared in America, while the *United States Pharmacopœia* was in preparation. It is avowed in an extract from the preface to the *Pharmacopœia* of 1850, given in the present work, that the *Pharmacopœias* of the United Kingdom have been advisedly followed as closely as possible.

"It is of the highest importance that medicines having the same names should have the same composition; and, as British works on medicine are much read in this country, it would lead to never-ending confusion if the substances they refer to by name should differ materially from those known by similar names with us. It has, therefore, been a general aim to bring our pharmacy into as near a correspondence as possible with that of Great Britain; but in all cases in which greater purity or efficacy in the medicine, or greater convenience and economy in the process, or any peculiarity in the relation of the preparation to our own circumstances and wants, called for deviation from the British standards, modified or wholly original processes have been adopted."

In a section on Approximative Measurement, Mr. Parrish gives tables from Durand, Proctor, and his own observations, showing the great variation in the proportionate size of drops. As examples, in his own tables, we find the following: the figures representing the number of drops of different liquids equivalent to a fluidrachm, as dropped from (a) minim measures and (b) pint or half-pint tincture-bottles.

"Acetum opii (a) 69, (b) 90; Acidum aceticum (comm.) (a) 102, (b) 73; Chloroform (a) 276.5; (b) 180; Liquor ammoniæ (a) 62, (b) 49; Oleum tiglii (a) 92, (b) 80; Spiritus ætheris nitrici (a) 148, (b) 90; Tinctura opii (a) 147, (b) 106;" etc.

The result of seven trials of dropping water from common-sized was, that 31, 48, 32, 48, 60, 50, and 65 drops respectively were found equal to a drachm.

The second, third, fourth, and fifth parts contain much matter of great pharmaceutical interest, in re-

spect to the formation of various officinal and non-officinal medicinal compounds. At the commencement of the fifth part, there is a chapter on Prescriptions, intended for the instruction of the practitioner as well as of the druggist.

In discussing the question whether prescriptions should be written in English or in Latin, Mr. Parrish gives the preference to Latin; the object, in his opinion, being to combine conciseness with accuracy. Officinal names are preferable to common synonyms, which are often applied to different substances. Thus, in America, "snakeroot" may mean *serpentaria*, *cimicifuga*, *asarum*, *senega*, or *eryngium*, and perhaps other plants; while chamomile may be *anthesis*, *matricaria*, or *maruta*.

Mr. Parrish, as a pharmacist, gives some very useful hints to prescribers on the manner of writing prescriptions. Abbreviations he would have to be used with extreme care. While he does not altogether object to them, he would have every word written so fully that it can be mistaken for no other. As an example of the necessity of this, he relates that several years ago he received "a prescription for hydrate of potassæ 3i, to be dissolved in water ʒiij (dose, a teaspoonful)." The medicine intended was hydriodate of potassa (iodide of potassium).

Another point on which Mr. Parrish insists, is the necessity of distinctly writing the signs denoting the weights and measures. American physicians must be very careless in this matter, when it is found necessary to state that

"There are not a few prescriptions on our files in which the sign intended has been reached only by guessing, or by reasoning upon the known dose of the drug, rather than upon the shape of the sign. A flourishing style of chiropgraphy is nowhere less in place than on a physician's prescription. . . . It is not easy to illustrate in print what an examination of the chiropgraphy of many prescriptions would make apparent, that the reading of a prescription frequently requires more skill and judgment than the compounding it." (P. 686.)

In conclusion, we can only express our high opinion of the value of this work as a guide to the pharmacist, and in many respects to the physician, not only in America, but in other parts of the world.

A MANUAL OF QUALITATIVE ANALYSIS. By ROBERT GALLOWAY, F.C.S., Professor of Practical Chemistry in the Museum of Irish Industry. Fourth Edition, revised and enlarged. Pp. 331. London: 1864.

In this new edition of his instructive manual, Mr. GALLOWAY has laboured to render it a still more competent guide than it was before. He has divided the book into two parts; the first of which contains the matter of previous editions, with additions and alterations; while the second, in which an outline of organic analysis is given, is here introduced for the first time.

In his *Second Step in Chemistry*, which we had the pleasure of reviewing some time ago, Mr. Galloway introduced the new chemical nomenclature and notation. In the work now before us, he retains the old system; observing that

"Students who know the new language, know, or ought to know, the old; and, therefore, it will be no

inconvenience to them to meet with the old, as they will understand it, and will be able, if necessary, to translate it into the new."

We doubt whether all chemical students will agree with Mr. Galloway that it is not inconvenient to be obliged to learn two systems of chemical language. They would most probably prefer that there were but one system. Chemical science, however, is yet unfixed; and hence those who apply themselves to it must bear with the trouble attending occasional change in the estimate of terms and figures.<sup>2</sup>

Whatever difficulties exist in the way of studying chemistry, from the cause to which we have alluded, Mr. Galloway has certainly done much to neutralise them, by the simple instructive manner in which he places the principal details of the science before his readers.

PRINCIPLES OF HUMAN PHYSIOLOGY. By WM. B. CARPENTER, M.D., F.R.S., etc. Sixth Edition. Edited by HENRY POWER, M.B. Lond., F.R.C.S., etc. Pp. 946. London: 1864,

THIS standard work on Physiology has again appeared, in a Sixth Edition. The volume has reached, and rightly reached, a position in professional estimation which places it beyond the field of criticism. We may truly say of it, in a word, that there is no more comprehensive and complete treatise on Physiology in the English language.

This sixth edition appears under the auspices of Mr. POWER; and Dr. CARPENTER tells us the reason why. Having retired from the position of teacher of physiology, Dr. Carpenter "did not feel it incumbent upon him to keep up with the progress of the science in detail"; and, moreover, he now "felt it his duty to devote such power as remains to him rather to the extension of the boundaries of knowledge by researches of his own, than to the co-ordination of the results elaborated by others." Dr. Carpenter adds that, with the exception of the first and second chapters, he "holds himself exempt from responsibility, in regard either to the scientific character or the literary execution of the present issue."

The editor, Mr. Power, tells us what alteration the present volume has undergone—in what respects, in fact, the edition of 1864 differs from that of 1855. The sections on the Function of the Cerebrum, which occupied 140 pages, have been now omitted. To the chapter on Food, etc., have been added the results of the experiments of Bernard, Adrian, and Eckhard, on the influence of the nervous system on secretion; Brücke's and Meissner's experiments on the formation of peptones, etc.; Ruge and Planer's account of the gases of the intestines are referred to; osmosis is described; etc. In the chapter on the Blood, a section on the Pneumatology of the Blood has been added. In the sections on the Circulation and Respiration, much new matter has also been given. To the chapter on Nutrition, has been added a new section on the Balance of the Vital Economy. The researches of Bernard, Pavy, Rouget, and others, as to the glycogenic functions of the liver, are detailed. The difficulties which still overshadow our knowledge of the nervous system are pointed out. In short, the whole work has undergone complete revision; and the principles of physiology are brought up to or detailed in accordance with our present knowledge of the subject.

We sincerely congratulate Mr. Power on a successful completion of his very laborious and serious labours.

## British Medical Journal.

SATURDAY, NOVEMBER 12TH, 1864.

### THE ARMY MEDICAL SERVICE.

THE College of Physicians of London has undertaken an inquiry into the condition of the Army Medical Service. By this we suppose it is implied that the College will investigate the nature of the grievances under which our army medical brethren labour at this present time. It is much to be desired that the College would extend its field of inquiry, and include, in fact, the condition of the Navy Medical Service. Unless we are much misinformed, the navy medical officer labours under as heavy and as many grievances as the army medical officer. We would, therefore, venture to suggest to the College that it should delegate to its Committee power to embrace in its inquiry the Navy Medical Service.

The influence which the College of Physicians has with the Government is considerable. The Government, in matters of a medical character, has on several occasions applied to the College for advice and assistance. Doubtless, therefore, any recommendations from the College would be received by the Government with much consideration. We, therefore, regard this present inquiry as one of considerable importance to the interests of the army medical officer. From its position, the College naturally feels the responsibility which rests upon it in any recommendations which it may hereafter think proper to make to the Government or to any subordinate officials of the Government on the matter. It will, therefore, doubtless proceed with great caution, and advise or recommend only on a full assurance of the justice of the cause which it may advocate. In the meantime, it is the business of its Committee to make themselves masters of all the facts, and, having done so, to report thereon to the College.

We state the position of the case, because the Committee are now in a position, and in fact ready, and, we believe, desirous, to receive information from those who are capable of giving it, on the subject at present under their special consideration. They, of course, must be made assured of the existence of the grievances of which the army medical officer complains. They must have the exact nature of the grievances laid before them, and be fully acquainted with the way in which they operate, as prejudicial to the interests of the medical officer and of the public service. Of the actual existence of those grievances we have ourselves no kind of doubt.



We have no kind of doubt, from the many facts which have already passed under our observation, that those grievances are of a kind which render the position of the army medical officer very difficult and most anomalous, which place him in a position such as no other military man occupies. *The army medical officer has, in truth, no defined status in the army.* He is at the mercy of his commanding officer. And the result is what the Duke of Cambridge has so often repeated as a boast, and as an encouragement to the "doctors": "Only, says he, "do you behave well, and you will be treated well!" What would be thought by all the other officers in the army, if they were told that they would be treated, *not according to their rank, but according to their behaviour?* We have facts before us which satisfy us that the Committee of the College will find there is a real substantial work which they can take in hand; a positive, a cruel grievance, inflicted on the Army Medical Service by the prejudice of aristocratic officialism. Sure we are that, if the facts which are known to us were known to the House of Commons, the Duke of Cambridge and his Whitehall scaffolding, and the cobbling and ignorance and prejudice which are at work behind the hoarding there, would soon be removed, as injurious to the public service, and unjust to the medical officer.

THE Medical Council (as our readers may remember), at their last session, determined to take into consideration the amendments required in the Medical Act at an early period of their next session. In consequence, we suppose, of this resolution, the Branch Council in England are about to meet, in order to take the subject into consideration, preparatory to the assembling of the General Council; in order, doubtless, to prepare the way for the Council, and facilitate their operations in the matter. We would, therefore, call the attention of the profession to the fact, in order that it may, through its mouthpiece, the journals, aid and assist the Council by an expression of its opinions and its wants. The questions to be answered are: What are the grievances felt by the profession? and what are the alterations required in the Medical Act whereby they may be removed? We need not remind our readers, that it may be difficult to obtain any alteration in the Medical Act, unless a strong opinion on the subject be expressed by the profession at large. Indeed, and reasonably enough, unless the representatives of the profession—we mean the Medical Council—are assisted by the profession at large, they may be unable effectually to further the welfare of their clients. We would, therefore, invite our readers, in due season, taking time by the forelock, to discuss the subject; to express their feelings, and give utterance to their just complaints, concerning the defects of the Medical Act as it now stands law.

MR. TALLEY continues his injudicious and vain efforts at the extinguishing of what he considers to be illegal practice. Mr. Talley, with the best motives it may be, is, doubtless, injuring the cause he would serve. He is prejudicing magistrates and other authorities against attempts to put down quackeries and offences against the Medical Act. This week, again, we find him engaged in a vain prosecution.

"Dr. Charles Watson, of No. 1, South Crescent, Bedford Square, was charged with having falsely represented himself to be a physician and surgeon, in violation of the provisions of the Medical Act. The end of the case was, Mr. Flowers said that the case was clearly not made out, and the summons must be dismissed."

THE proper way to regard and treat what is called "spiritualism" is taught us by Mr. Faraday and Mr. Ward. Those of our contemporaries who solemnly undertake an investigation into, and seriously argue upon, such an exhibition of chicanery on the one side, and of educated ignorance and credulity on the other, seem to us to aid the delusion. The mere discussion of such a thing is a partial admission of the possibility of its truth. We suppose, that in most cases where the press has entered seriously on the subject, it has done so mainly for the object of working the delusion for its own benefit. At all events, to treat of such a degraded exhibition to members of the medical profession, is simply to insult them. Mr. Faraday and Mr. Ward have shown us how to deal with such an imposition and with such impostures.

"Mr. Faraday, in answer to a spiritual invitation, has sent the following characteristic reply. 'Gentlemen,—I am obliged by your courteous invitation; but really I have been so disappointed by the manifestations to which my notice has at different times been called, that I am not encouraged to give any more attention to them; and I, therefore, leave those to which you refer in the hands of the professors of legerdemain. If spirit communications not utterly worthless should happen to start into activity, I will trust the spirits to find out for themselves how they can move my attention. I am tired of them. With thanks, I am very truly yours, M. FARADAY. Royal Institution, Oct. 8.'"

"At Newcastle, Mr. R. Ward, proprietor of the *North of England Advertiser*, applied for a summons against the Brothers Davenport. Mr. Ward stated that the Brothers Davenport, by professing to show spiritual manifestations, had obtained money to the amount of about £100 from the people of Newcastle, and that he himself had been defrauded of a guinea. By their professions, the Brothers Davenport had induced large numbers to attend their *séances*, where certain alleged spiritual manifestations took place, but which he believed to be nothing but a swindle; and that the money, therefore, had been obtained under false pretences. He believed the manifestations to be a thorough swindle, and that the parties ought to be punished. The chairman said that he himself did not believe in these silly exhibitions; but he did not think the magistrates had power to grant a summons in the case. If people would be so foolish

as to pay their money to witness such exhibitions, it could not be said that they had been deluded by false pretences."

At the opening of the Faculty of Medicine of Paris on the 3rd instant, the Minister of Public Instruction was present.

"I am present" (he said), "in the first place, to render homage to our celebrated Faculty of Medicine; next to the skilful masters, who are the honour of our public education; and, lastly, to you, gentlemen, students, who are the hope of our future science, of the profession..... I am annoyed at hearing it said that physicians over the Rhine are more learned, and physicians over the Channel more practical, than French physicians. Young men, let me ask you to surpass the Germans and the English. I have often heard a discussion as to whether medicine is a science or an art. It is both one and the other. Your hand must be light, skilful, and ready; your head well stocked with knowledge. That is your programme. Fill your head with good ideas; and so make your hand firm and sure."

THE following case of poisoning by chloroform is related by Dr. Macker in the *Gazette Médicale de Strasbourg*.

"A soldier, 27 years of age, who had been drinking hard for some days, took fifty *grammes* of chloroform early one morning. He was shortly afterwards found vomiting violently. He soon became insensible; was lying on his back, completely insensible; cadaveric look; extremities cold; eyes turned upwards convulsively; pupils enormously dilated; mouth half-open, and emitting a strong odour of chloroform; breathing stertorous; pulse 100, feeble; heart's action weak and irregular; complete resolution of limbs; general anæsthesia. In the course of a short time, respiration was occasionally suspended; pulse insensible; tracheal *râle*. Artificial respiration was performed; with frictions on the body, etc. No antidote could be administered, as deglutition was arrested. The lips were blue; the tongue swollen; the pharynx obstructed with mucus. Coffee-glisters were administered. This condition lasted up to nine o'clock; occasional contractions of the limbs being observed. The tongue was drawn forcibly forwards, and the mucus allowed to flow out by turning downwards the head. About ten o'clock, the pulse rose; the skin became warm; but anæsthesia continued. Towards the middle of the day, he was much better; and at one o'clock, when he became sensible, he was taken to the military hospital. He had no recollection of what had happened. Prostration followed; vomiting ceased; but the pupils remained dilated. On the following day, he was jaundiced; with no other symptom, except pain at the epigastrium."

THE asserted evil results of marriages of consanguinity were discussed at length at the Lyons Medical Congress. Opinions on the subject were opposed *toto calo*. The difficulty of deciding the question lies in the fact that it is at present almost impossible to say whether the diseases said to be the results of such marriages are really their effects, or are only the effects of the accumulation and multiplication of hereditary pathological conditions existing in those who form marriages of consanguinity. The breeding

in and in of carefully selected and healthy animals seems to tell in favour of the latter view of the case.

M. Liebreich has suggested another to the many ills—viz., mental disorders, cretinism, congenital malformations, deaf-dumbness, etc.—which are asserted to be the effects of marriages of consanguinity. The pathological item is one taken from his own speciality; it is pigmentary retinitis. Having noticed this affection in the child, issue of cousin-germans, and wishing to test its value as an etiological fact, M. Liebreich visited the Deaf and Dumb Asylums at Dresden, Breslau, and Berlin: and he found that, of 241 deaf and dumb, 14 presented the pigmentation of the retina; and from these cases he argues out his conclusions. We need hardly say that his interesting suggestion wants much strengthening before it can be received as a fact.

M. Masse informs the Academy, that a mixture of fifty *grammes* of water, fifty *grammes* of alcohol, and fifty *centigrammes* of creasote, will cure all skin-diseases which are produced by the presence of parasites.

M. Gailleton, surgeon in chief of L'Antiquaille at Lyons, gave the Medical Congress a complete and interesting account of the genesis and treatment of trichophyton.

This vegetable fungus, he says, possesses an energetic and contagious power such as to resist all means of cure. The fineness of the spores, and their great force of contagion, rapidly spread the disease in schools, etc. The dust of skin-disease hospitals is full of them. The isolation, therefore, of patients affected with trichophyton, is absolutely necessary to prevent its spread. For treatment, M. Gailleton recommends strong caustics to be applied to the isolated patches. He also advises that the heads of the patients should be covered, in order to prevent the dissemination of the spores.

Our readers will probably be interested and surprised to hear that there is an establishment (now fifty years of age) at Naples, where the cowpox is propagated amongst heifers.

The establishment is due to M. Galbiati. The heifer is brought to the door of those who are to be vaccinated. The conductor snips off a pustule with scissors, and presents it in a pair of forceps to the doctor who vaccinates. Vacciniferous cows, M. Palaschiano told the Lyons Congress, are seen going about the streets of Naples just like milking cows. There is a vaccine establishment at Naples; but its operations are confined almost wholly to the poorer classes. Ferdinand II, who supported this establishment, nevertheless had his children vaccinated from the cow; and so also do all those who can afford to pay five *francs* for the use of the vacciniferous animal. Since the annexation of Naples to Italy, this custom has spread; and, in fact, the cowpox is now generally used in the army and in schools. The propagation of the cowpox has during the fifty years been kept up from cow to cow. Sometimes it has been renewed by matter obtained from England. M. Galbiati, it may be added, has found the affair answer as a speculation. Besides the profit arising from the supply of matter, he has never found any difficulty in the sale of his animals as articles of food.



# Thirty-ninth Annual Meeting

OF THE

## ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

*[Continued from p. 531.]*

THE second general meeting took place on September 21st, at 10½ A.M. There were letters from high personages read, regretting that they could not be present. And this was indeed to be regretted, as it is supposed that the presence of royalty, even from the third step to the throne, would have had a mitigating influence upon some boisterous spirits, which exhibited in that meeting more than ordinary energy. Germans, no less than Englishmen, are lord-worshippers.\* This was presently illustrated by an address to the Archduke Stephan, which was read by the second leader of business, Professor Leuckart. By the exuberance of its loyalty, the profundity of its submission, and the sublimity of its compliments, this address created a good many smiles. Happily, it did not produce any interruption of the decorum of the assembly, as it was not proposed that the meeting should vote it. It was simply announced that it would be laid open for signature by persons desiring to express their minds in such strains. If the address had been proposed for adoption by the meeting, it would certainly have been rejected; and I myself should have spoken and voted against it. This might have given unnecessary umbrage to the addressee, who had shown nothing but gentlemanly urbanity, and had not deserved to be addressed in abject language. The address received few signatures, and, I am sure, produced little edification to its enlightened recipient.

Then came the sad announcement of the melancholy death of one of the members of the Congress, who had been found dead in his bed. The meeting expressed its deep sympathy in appropriate terms and manner, and made arrangements for a proper representation at the conduct of the funeral. The German meetings during the last four years have all been accompanied by similar disasters. Thus the Königsberg meeting in 1860 had to be opened with the announcement that its intended president, Rathke, had died the night before of apoplexy. His inauguration address was found ready on his desk, and read to the deeply moved assembly.

The next business was the selection of a place of meeting for next year. A strong party propounded Dresden; but it then transpired that the Agricultural Congress would be held in that town next year, about the same time during which, according to the statutes, the naturalists and physicians meet. A patriot then proposed Flensburg, and gained some applause with his demonstrative proposition. But it came out that Schleswig-Holstein was quite exhausted, and not in the humour for festivities; and that at Flensburg there were no rooms even for meetings. Then somebody proposed Breslau. Of

Hamburg, which was also thought of, it transpired that this free Hanse Town desired to treat the Association to its beauties in a future year, when the new Institutes for Science, which they were engaged in building, would be ready. Then the northern Germans, thinking to get a tour in the Tyrol at the same time, proposed Innsbruck. The leaders of business proposed Hanover. It was soon evident that the choice lay between the last two places, and that Dresden and Breslau had no chance. A zealous gentleman now had a hit at Innsbruck, saying it was so Roman Catholic and priest-ridden that an assembly like this would not be liked there—nay, not be quite safe. This was received with remonstrance by the meeting, and rejected with scorn by a speaker. Such a remark, he said, indicated the point of standing of the person that made it. All other persons in the room could only assume one of two points of standing with regard to it: they must either be above or below it. The effect of this was quite overwhelming. The meeting, however, after the agitation and applause had subsided, called for a division, which was accordingly taken. A close scrutiny was required, as the votes for Innsbruck and Hanover seemed to be equally balanced, the Dresden party having plumped for Innsbruck; but the tellers declared that Hanover had been victorious by a majority of sixty votes. Krause, the celebrated anatomist of that town, was elected first leader of business for 1865; and Karmarsch, Professor of Natural Sciences, the agitator for the unification of weights, measures, and coins in Germany, second leader of business.

Next on the list of proceedings was a popular lecture by Professor Remak, on Galvanism applied to the Healing of Diseases. Professor Remak waived his right to give the lecture; which was discreet, as most persons had already heard a great deal about the subject. But he also coupled his resignation with a request to be permitted to move a resolution instead, for the purpose of changing something in the standing orders of the meeting. This the meeting refused to do, amid much confusion, cheering, laughter, and presidential bell-ringing. All this arose from the circumstance that the business was not led, but allowed to drift its course; and that the time devoted to pure business matters was not sufficiently marked off from the time devoted to lectures on scientific subjects, either in the programme or in the mind of Professor Remak. At last the waters became quiet; and Professor R. von Schlagintweit delivered a lecture on the Trade Routes of Central Asia. This was listened to with the greatest attention, and excited general interest. It was illustrated by a series of large coloured views of the principal regions and towns through which the routes pass. The vivid delineations of the experienced and well known traveller were justly rewarded with general applause. The late King of Bavaria had the indiscretion to give to the brothers Schlagintweit the surname of "Salinilinski", as a memento of their Asian exploits. The name, a curiosity of itself, difficult to pronounce for a German well accustomed to the flexed or pointed vowels such as ü and ö, but quite impossible to thorough and untrained English lips, has drawn down much ridicule upon its recipients. This sentiment has been carefully nursed by their antagonists, and upheld by prints professing comicality, no less than by such serious publications as the *Athenæum*. But the travellers really deserve sympathy, as for an affliction; and this I beg my readers to extend to them. For they got a name imitating the well known surname given to Diebitsch after he had crossed the Balkan in 1828—"Sabalkanski"—without the substantial accompaniments of such an elevated peerage. What struck

\* "This morning, at eight o'clock, the *Salamis* was brought alongside of the Corporation Pier (Hull), and at a quarter past eight the prince was landed. He was received by the mayor, aldermen, and common councilmen, and the Danish consul, Mr. Clement Good. The pier was lined on either side with persons anxious to see the royal infant. Although the weather was rather raw, their desires were gratified. The infant prince was held up, and his face uncovered. Mrs. Davis, the wife of Mr. Sheriff Davis, on his Royal Highness being brought to the pier, went forward and presented him with a toy in the shape of a white fur rabbit." (*The Morning Star*, October 18th, 1864.)

me most in Schlagintweit's lecture was the account of the code of honour amongst robbers in Central Asia. The division of labour there is so complete that a robber never steals. Goods may be left on any part of the roads, and are as secure as in the warehouses in the London Docks. The predatory class, one and all, would be ashamed to take a thing which is left to the keeping of the good faith of all; but they would take the same goods from the caravans by pillage and murder, and think it a glorious deed. This is a new kind of chivalry, which I recommend to the attention of moral philosophers.

Dr. Dohrn of Stettin announced that there was a surplus in the funds of the Stettin (1863) meeting, and asked permission to employ it for scientific purposes. This was gladly given. Dr. Posner then commenced a lecture on Spirit and Tobacco, and their Influence upon Mankind. Whether this awoke the slumbering sympathies for an early glass and a cigar, or whether the people thought they knew all about it, I cannot tell. Enough—a general exodus commenced, the noise of which made the speaker inaudible for a long time. I confess that I was suddenly seized with a longing after the fragrant weed, to compose my shattered nervous system. All I know of the conclusion of the meeting is, that the President announced it formally at one o'clock, it having been virtually at an end some time before. Dr. Posner's eloquence being unable longer to fascinate the restless spirits by a subject which, one would have thought, by its sublimity, would rivet the attention of all.

The general meeting over, those who could yet stand more science rushed up to the Zoological Institute, to see some pigs which Dr. Mosler had infected with trichinæ and measles. I can affirm that I never saw such a miserable pair of pigs, and that I believe them to have suffered more from the want of ordinary care and cleanliness than from the diseases with which they were infected. "But," said the novices, "pigs are said to be very lame with trichinæ." "Ah!" said others, "that's the appearance of trichinous pigs! Well, they are easily recognised!" I thought it a duty to inform the assembled gentlemen that pigs, however much or little trichinised, would not offer the appearance of the present pigs, unless they were badly kept, starved, and allowed to lie in dirty and cold places. I adduced the experiments which I had myself made for a public purpose, as proofs of my statement; and said that trichinous pigs might die, suffer much or suffer little from trichiniasis; but that, the acute stage of the disease once over, they gained flesh and fat, continued to grow, and recovered their former health and unexceptionable appearance and appetite. If all the experiments instituted at the zoological establishment at Giessen have been made upon animals similarly kept, I think the evidence afforded by them to be much vitiated by this circumstance. I think that 25 per cent. of the severity found by these experiments, and a similar amount of the mortality from trichiniasis, have to be put to the account of the keeping of the animals. This explained to me also why Professor Leukart could not keep any rabbits alive which were infected with trichinæ. I have kept thirteen out of some fifty infected; and one gave birth to a nest of young ones four months after trichinosis. Others are likely to do so hereafter. With due care, cleanliness, proper food, and warmth, rabbits may survive trichiniasis, just as well as men and pigs.

Of the experimental pigs, the first, or trichinised one, was explored with the new harpoon of Professor Weber, of Halle; and a piece of trichinous pork was extracted and scrutinised under the microscope.

Pig's-flesh shows better than rabbit's-flesh that the trichinæ are inside the sarcolemma; human muscle shows it best. The harpoon is a kind of trocar-stiletto, excavated behind the point, and sharp round the edge of the excavation, so that it cuts in being withdrawn. It does not tear like Middeldorpf's; and one does not run the risk of producing an abscess, as is the case with the latter. I should have been very glad to have had this harpoon during my studies of trichiniasis at Stassfurt and Dessau, where I was obliged to use the common incision for furnishing the proof absolute of trichiniasis; namely, a muscular fibre or two, with a few trichinæ, taken from the flesh of the living patient. I should now always try this harpoon before resorting to incision; and having seen it used, and used it myself, I can recommend it to all my readers. Tumours may also be explored with it advantageously, and sufficient substance obtained to make a satisfactory microscopic examination.

The second pig was not only trichinised, but also measles. The pectoral muscle being laid bare, was found richly dotted with bladder-worms of the size of lentils and peas. They all contracted actively while warm; and, under the microscope, were fully developed; rostellum, rings of hooklets, suckers being all clearly visible inside the retracted neck within the bladder. On examining the eyes of the pig, I failed to discover any cysticerci, either inside the bulbs or under the conjunctive; but the yellow discharge in the lower angles of the eyes was present, together with the conjunctivitis, and, on *post mortem* examination, the muscles of the eyes were found infected. Failing with the eyes, I tried the tongue. Having forced the mouth open by means of a piece of wood, I caused an assistant to draw the tongue forward with a hook; and, on examining its lower surface, found a very slight projection, indicating a measles below. I caused it to be digitally examined by several of the bystanders; and then excised the measles, which, under the microscope, showed itself as perfect as the rest. This operation is of practical importance, as a ready means of diagnosing measles in the live pig with certainty. It constitutes the essence of what, in exporting places and harbour-towns, is called measles-trying. The pig was killed in the evening; and exhibited in the Medical Section next morning. It was thoroughly measly; its heart being literally covered with bladder-worms, and presenting a great similarity to the heart of a calf which Dr. Mosler had infected with the eggs of *tania mediocanellata* or *saginata*, the tapeworm which man receives from beef and veal. This heart Dr. Mosler has represented in two plates in his *Helminthological Contributions*. While, in the interest of science, I have freely criticised these experiments as to one particular point—namely, the keeping of the animals; for which, in this case, I know subordinates, and not principals, to be responsible; but subordinates acting for a stranger having no control over them, but only the inducement of the "backshish"—I must, on the other hand, fully acknowledge the assiduity and earnestness, and withal the success, with which Dr. Mosler has worked out these repetitions of the experiments of Küchenmeister and Haubner. For already Harvey has enunciated that experiments conveying important evidence to the mind could not be too often repeated, and that every repetition was certain to eliminate a collateral error or to extend collateral evidence. Therefore, the repetition of good experiments is a merit, conveying the confirmation of phenomena to the individual inquirer; and making him, and all those to whom he can demonstrate, additional witnesses to the truth of the original observation. The words of Harvey are the best answer which anybody can give to the clamours of sensation philo-



zoists and Pall Mall sentimentalists. We repeat experiments upon animals to promote the welfare of man. Indeed, Science is the greatest philanthropist; and its disciples need not fear the misdirected zeal of that company of feeble individuals, which insists upon saving brutes at the cost of men.

Never was a dinner more longed for, or better deserved by previous work, than the Association dinner on that 21st of September. The Physiologists had toiled from seven o'clock until nearly two without intermission. The other sections had mostly begun at eight; and after ten o'clock, adjourned to the general meeting, which lasted till nearly one o'clock, as we have already seen. The Section for Physics, also, like the Physiological Section, had another meeting at one o'clock. At half-past two, all met again at Zinsser's Gardens, ready to dine. The dinner lacked the *éclat* of the first, or inaugural one, and the attendance was smaller; but it gained thereby greatly in what the Germans call *Gemüthlichkeit*, or, to represent the idea in some manner, the word not admitting of direct translation, we got it a little more comfortably, there was a little more elbow-room, a little less crowding, noise, heat, and hurry. We relished the principal convivial enjoyment, conversation. I had the gratification of sitting by the side of Metz of Darmstadt, the staunch defender of liberty, the leader of the German National Verein; his accomplished wife opposite gave the intellectual soprano to our more trivial or lower-tuned sentiments. Here, then, were law and lyric keeping me in countenance; again, opposite, a little to the left, sat Ule, a fertile and agreeable writer on natural things, the editor of the weekly periodical *Nature*, which entertains and instructs many thousand families of the Fatherland. Here, then, were the three kingdoms to take my subjects from, or put my creations in; but I had also a philosopher near, a man expert in the depths of minds and in those of mines; it was Herr Stein, the Mexican, so-called at Darmstadt, his birth-place and residence, because he spent his youth and made his fortune in that charming and charmed land. My left-hand neighbour was a brother in physic remarkable for his silence; I had met him years ago on a journey in the midst of the great basaltic phenomena of the Vogelsberg; he had given me specimens of chabasite such as the British Museum does not contain—it was Dr. Strack of Nidda. There was, therefore, recollection of agreeable times added to the other treats, of youth, travel, and abandonment to the study of nature, and of associations having for their centre the parental home. Great was the treat of those two hours. After that, the acquaintances, old and new, came by dozens. Then I sucked as the bee sucks, short and sweet; and left myself to the magic powers of assimilation.

The dinner-speeches were most trivial, with the exception of one, and that was very original and full of effect. It was given by Forstrath Hartig of Brunswick, our friend of the Botanical and Zoological Sections. His subject being the prosperity of the Association, he shortly reviewed its effect upon the national character. This brought him to the struggles of the Germanists in the time during and after the French wars; and immense was the applause when he related how "old father Jahn" had made Germans of them, and caused them to abandon French affectation. When a boy said "merci" instead of "Ich danke", Jahn took him on the knee, and gave him a flogging with a rope's-end. "So much I know," concluded the old Forstrath, in his most humorous style, "that of those whom Jahn let go from his knee and from under his rope's-end, none said again 'merci' then or ever after."

[To be continued.]

## Association Intelligence.

### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

The next meeting will take place at the Fountain Hotel, Canterbury, at 3 P.M., on November 17th. Gentlemen wishing to read papers are requested to forward their names forthwith to the Secretary,

ROBERT BOWLES.

Folkestone, October 1-61.

### SHROPSHIRE SCIENTIFIC BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Lion Hotel, Shrewsbury, on October 19th; T. B. BARRETT, Esq., President, in the Chair.

1. After some appropriate remarks relative to the objects and importance of these Branch gatherings, and the advantage each gained by the social and friendly discussion of professional matters, the PRESIDENT read some very interesting cases of rare Diseases of the Bladder and Kidneys, which he illustrated by wax models of the diseased structures.

2. The PRESIDENT also introduced and experimented with the Nitrite of Amyle and the Metal Magnesium.

3. A new Sling for Fractured Jaw, of his own construction, was shown by the President.

4. Several papers were read, and forwarded for insertion in the JOURNAL.

5. Mr. Wood introduced some successful cases of Excision of the Elbow, in which the full powers of the arm were preserved; also a case of Amputation at the Shoulder-joint, in consequence of an accident to a child four years of age.

6. A fixed Ophthalmoscope, the invention of one of the members, Dr. Newman of Stamford, was exhibited, and much noticed. It has been found very useful in demonstrating the appearances of the interior of the eye in its healthy and diseased states; and for hospital purposes, where pupils have to be taught the use of this instrument, it was considered to be a very ingenious and efficient application of the principle for conveying the requisite instruction.

*Medical Provident Fund.* There was a long discussion upon the subject of the Medical Provident Fund, many of the members desiring further information as to the working of the system. There was, however, a strong desire expressed by the members generally to support it. The Director for this Branch was requested to report to the next quarterly meeting.

*Dinner.* The members and friends afterwards dined together, Mr. Moorhouse filling the place of Vice-President; and a very social and agreeable evening was spent.

Dr. Burd was elected Vice-President for the ensuing year, and one new member was added to the list of members.

GENIUS AND INDUSTRY. "Broussais, an ardent and violent disputant, a brilliant orator, energetic, and highly imaginative; Laennec, simple-hearted and modest, a patient and sagacious observer. How different their characters, and the results of their labours! Broussais has left a reputation brilliant, but ephemeral; whilst that of Laennec is solid and durable. The work of the one was the work of an agitator; the work of the other that of a real founder."

## Reports of Societies.

### BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

ANNUAL MEETING.

[Held at Bath, September 1864.]

*Physiological Aspect of the Sewage Question.* A discussion on this subject was introduced by Dr. HUGHES BENNETT, who, after enumerating the difficulties attendant on the attempt to apply sewage to agriculture, said that all plans for the utilisation of sewage were interfered with by the assumption that there was something pestiferous or unhealthy in the fermentation, exposure, and smell of sewage. He agreed with Mr. Rawlinson, that the health of the people was the first consideration; but he could not agree with him that the risk to public health from the utilisation of sewage was such that it was better at any cost to remove it from towns and throw it into the sea. To prove the fallacy of that opinion, and remove some of the difficulties that surrounded the question, he laid down a series of propositions. The first was, that atmospheric air, strongly impregnated with odours of various kinds, was not necessarily injurious to health. In support of this proposition, he said that in those districts on the shores of the Mediterranean where large tracts of land were employed in the cultivation of odorous flowers, no epidemic was known to be produced by the atmosphere; that no injury to health had been shewn to result from an establishment which existed in one part of Paris for the distribution of manure; and that the condition of the Thames in 1858 had not been productive of the slightest bad effect in London. He had just come from Naples, which was a very volcanic region, and bubbles of sulphuretted hydrogen were continually springing up in the sea; while the drainage was very badly managed. The drains formed through the city were large slits, which threw the smell up, and the odour was so great that he never smelt anything like it elsewhere. The people were so satisfied that this smell was injurious, that rents at the top of the house were twice as much as the rents below. He found that Naples was not more subject to typhoid or other fevers than any other city. He had visited all the large hospitals in Naples, and amongst them the military hospital, which contained at the time 800 patients. The terrible dirty condition and effluvia at that hospital were such as he could not attempt to describe, and yet the medical superintendent told him that there was no fever caused in that way. There was only one case of typhoid fever in the house at a time. The second proposition was, that atmospheric air, without smell, was often most dangerous. In support of this, he referred to the marshes of Essex and Lincolnshire, the low grounds of Holland, the Campagna of Vienna, the Delta of the Ganges, the Guinea Coast, and other parts of the world, where the most pestiferous fevers prevailed epidemically, and yet these effects were never attributed to bad odours, nor did bad odours exist to any extent. Some deleterious gases, such as carbonic acid and others, had no smell; while others, such as carburetted and sulphuretted hydrogen, had smell; but in these the absence or presence of the smell had nothing to do with their unhealthy properties. The smell of the water of Leith had been described strong enough "to knock down the devil"; but it was not pretended that any person whatever had suffered any

inconvenience from the bad smell. Several persons living on the banks of the stream had declared that this was the healthiest part of the city, and the district surgeon, under whose house the water actually ran, repudiated the idea that it had any injurious effect. Smells, as smells, were neither injurious to health, nor were they a nuisance to those who lived amongst them. [*Much laughter.*] The people became accustomed to the smells. [*Renewed laughter.*] The sense of odour was really paralysed; as one might test, by holding to the nose for any time an odoriferous flower. [*Hear.*] His fourth proposition was, that deleterious gases arising from effluvia were only injurious by being carried into the blood; and to this end they must be sufficiently concentrated, and the atmospheric air proportionately diminished. The fifth proposition was, that emanations from drains and from sewage entering running streams were in no way dangerous. In support of this, he cited the statistics published by Dr. Littlejohn, officer of health of Edinburgh; and said that, according to the Registrar-General's return, the death-rate of the Leith district was 17.62 against 24.5 over the whole city. There was a general idea that, when sewage and other matter were thrown into the streams, they destroyed the fish. No doubt they did destroy the fish in the Thames in great quantities; but in the Eden at Carlisle, so far from the sewage being mischievous to fish, they actually increased in weight upon it. The sixth proposition was, that typhoid fever could not be proved to originate with the fermentation of sewage water. His own view was, that we were profoundly ignorant of the causes of epidemic disease. It had been said that typhoid fever originated with drains, and there were a great many coincidences to support that doctrine. There were a number of instances in which fevers had originated in a town where a drain had been opened near, or where the smell was more powerful than usual. But, without going into a great many examples, he might say that there were innumerable cases of emanations that had never caused epidemics to counterbalance those that could be cited on the other side. The seventh proposition was, that improving drainage by costly works did not necessarily remove disease. In Paris, where great improvements had been carried out, epidemics had not been diminished. The old town of Edinburgh had no draining at all up to a recent period, and old pupils at the University could remember that some years ago a case of typhoid fever was unknown there. It was said that the introduction of the water-closet system had brought the typhoid fever poison into the houses; that owing to an insufficient supply of water, the noxious gases now escaped inside instead of outside. That was a very plausible argument no doubt; but when he found that the disease in Edinburgh followed the failure of the potato crops, he believed that fevers originated from other sources than drainage. He considered that proper food and drink had much to do with the question. A paper had been read at Edinburgh, in which every cesspool was said to be a focus of disease. It was quite clear that where cesspools existed, the ground round them was saturated; and in that way animal matter, in a state of putrefaction, found its way into wells. The water was thereby poisoned, and drinking such water was favourable to disease. Dr. Macadam had shown that apparently pure water might contain most deleterious salts. Bad water, on the other hand, was often very bad to the taste; but it did not, therefore, follow that it should be injurious. The great seats of fever in our towns were the narrow closes where the dwellings were badly ventilated, and where insufficient and bad food, and many other injurious agencies were at work. If he were to say that any one of those agencies was the



cause of fever, he should be reasoning very erroneously. Dr. Budd was of opinion that drains might propagate, though they did not originate, fever. Attention ought to be directed to the prevention of the pollution of our rivers and streams, and to the consideration of how the sewage of towns could be best utilised, so as to return to the earth the fertilising qualities that had been taken from it. Human excrement, like that of all other animals, if properly employed, so far from being poisonous and injurious, was, in truth, the source of the growth of the vegetable, and thus of the animal world.

Dr. LIVINGSTONE believed it was most important to know that stinks were not the cause of fever in Africa. When they came down to Niamzi last February, they found that a large portion of the water of the river ran into a marsh about ten miles below; and, after passing through the marsh, it fell into the river at a point lower down. When it came out of the marsh it was as black as ink, and had a most abominable smell. They were obliged to stop at night in the midst of this smell. The white paint upon the two ships was turned quite black; all the brass work was turned to a bronze hue, and even the ropes were discoloured. He inquired of the natives if they had ever observed serious effects following these phenomena, but he was told that they never produced illness. This was actually the case as far as he and his colleague were concerned. From this and all their experience in Africa, they came to the conclusion that fevers did not come from the bad smells; he was of opinion that bad smells ought to be got rid of as soon as possible; but it would be a great mistake if medical men, or any one else, supposed that fever came from the presence of bad smells.

Dr. KIRK said that, in another instance in Africa, when passing by the side of a lake surrounded by mountains, they found the water much as Dr. Livingstone had described it in the instance he had mentioned, and yet in that neighbourhood there was never any serious fever. The water was used commonly for drinking purposes. For about twelve hours they had nothing but that water to drink; they used it without boiling. They saw the converse also. At one place, where the atmosphere varied from 80 to 100, when the grass was all gone and the leaves were off the trees, and the walls were free from decomposing matter, they suffered much. On passing a day in the mangrove swamps, where they never saw the sun, the fever did not come on; but on the following day a heavy perspiration came on, staining the clothing, and in that way perhaps the malaria passed off.

Dr. MACADAM said that the waters of Leith were partly tidal and partly running. So far as Edinburgh was concerned, it was a running river, but it was tidal at Leith. A bad smell was not necessarily an injurious thing; and chemists no doubt lived in the midst of sulphuretted hydrogen without experiencing any ill effects from it. But sulphuretted hydrogen, as liberated from organic matter in a state of putrescence, was another question. It was an indication of something worse behind. There were other matters produced by the decomposition. These things, which proved so dangerous, had not yet been isolated; but they were evolved after the sulphuretted hydrogen, or might be evolved without the sulphuretted hydrogen being produced at all. He thought there was some use in washing and cleansing thickly populated closes, in order to remove organic matter clinging about the places. Miss Nightingale had directed attention to thorough cleansing of hospitals, to the purification of the atmosphere, to the removal of the causes of the distribution of pernicious gases; and her efforts were successful in a marked degree. Regarding the Leith district of Edinburgh, Professor Simpson's evidence

went to show that the relative mortality in the district away from the river, was 100, against 160 close to the river. He could quite understand that where small quantities of sewage were discharged into a river, such sewage might not prove deleterious to fish, and might even tend to fatten them; but it was a different matter when it was thrown in in such large quantities, that the air of the water was materially injured. In Leith, instead of the proportion of oxygen in the water being about 28 per cent. as it ought to be, it came down to 4 per cent., and in such a liquid it was impossible for fish to live. He had tried the experiment, and the fish died upon the surface within a few minutes after they were put into the water. Dr. Bennett had said that the mortality of Edinburgh had not been reduced by improvements carried out there; but he (Dr. Macadam) was surprised some time ago to find that when the drain in the streets had been improved, the small drains from the houses were not connected with it; and it was a common thing with large houses to carry the drainage into a cesspool, and thence into a sewer in the street. The drains were frequently made of stone, and the sewage oozed through. He quite admitted that there were other causes than drainage affecting the mortality and general health of the people. But all this did not upset the notion that bad drainage was one cause of a high rate of mortality.

Dr. WILLIAM BUDD believed that Dr. Bennett was entirely right in laying it down as a fundamental principle, that foul gases had no power whatever to generate fever. He had endeavoured, in a series of papers which were published in the *Lancet*, and in the *BRITISH MEDICAL JOURNAL*, to prove that the notion that contagious fevers were engendered by noxious gases was irreconcilable with what was known of their actual gases. His idea was, that sewers never generated their poisons, but that they distributed them. The whole view of the influence of sewers in the generation of epidemic disorders arose from the fact, that the specific poisons which were the cause of the disease, were eliminated from the body, and carried into the sewer. We never should get very far in the work of prevention of these great scourges, until we realised the cardinal truths that it was in the living body alone that these poisons were generated, and that it was from the diseased surfaces of living bodies that the pestilential matter was given off. He was perfectly satisfied that the spread of diphtheria, typhoid fever, and even of scarlet fever, subtle as the poison might seem to be, might be prevented by destroying the specific exuvial before it was cast off and set at large amongst the community. To bring the present discussion to a practical issue, he proposed a resolution to the following effect:—

"That it is desirable that a committee should be appointed to report to the Association at some future meeting on the following question, viz: Whether the specific agent which is the cause of typhoid fever be ever generated *de novo* out of common sewage, or whether sewers only propagate this fever by the determination of the germ contained in the liquid discharge from people already afflicted with the disease."

The resolution was seconded by Dr. RICHARDSON, and carried.

Dr. RICHARDSON said that Dr. Snow years ago pointed out the difference between a bad smell and a poison. So far as this distinction went, he (Dr. Richardson) concurred with Dr. Bennett entirely; but there were some minor points in which he differed from him. He could not admit that they knew nothing of the origin of these epidemic poisons. Typhus fever arose from low and bad diet, and from overcrowding. With regard to typhoid, they had the clearest proof that the excreta of the disease taken

into the mouth produced the disease, and that it travelled mainly by water. Dr. Salisbury, while with the United States army, observed that a certain number of men rose every morning afflicted with camp measles. This disease was not different in any respect from ordinary measles, and it did not attack those who had it in early life. It was found that the straw upon which the men were sleeping, was covered with a description of fungus, and it was found, by actual experiment, that this fungus propagated measles. There were other classes of disease which occurred in epidemic form, with regard to which they exclude all idea of poison. He went with Dr. Bennett entirely, in saying that no organic poison could spring out of sewage matter; but the febrile condition that arose from imbibing gas from sewers had been tested by actual experiment. Cats, dogs, and every kind of domestic animals, had been subjected to air from sewers, and in all cases the symptoms were the same as those observed in human beings inhabiting close, ill-ventilated places—hot skin, quick pulse, and diarrhoea. While the temperature was low, and there was little evaporation, they might go on for a long time without any disease from sewers; but with a hot temperature, scarlet-fever and small-pox began to appear. It was of great importance that there should be such drainage as should absolutely and surely convey the poison away. The whole of the classes of disease he had referred to, with the exception of scarlet-fever, were intensified in their severity by the presence of bad air. Measles and typhoid fever were so acted upon; but he believed that small-pox was as fatal in the palace as in the humblest cottage.

The discussion was continued by Mr. McLaren, Dr. Cobbold, Professor Wanklyn, Mr. Michael, Dr. Crisp, Dr. Paul, Mr. Gillett, Mr. Ross, Dr. Gilbert, and Dr. Davy.

Dr. BENNETT, in reply, said that he had succeeded in the object he had in view, which was to provoke discussion, and he should leave the room with the idea that a great deal of information had been elicited, that would be useful in the solution of this important question. He had never said that bad smells were good things. He disliked them as much as anybody, but the great point he wished to force forward was that this effect of smell upon the health of the public had been greatly exaggerated.

## OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCTOBER 5TH, 1864.

HENRY OLDHAM, M.D., President, in the Chair.

FOUR new Fellows were elected.

*Cæsarean Section.* A case of Cæsarean section which occurred in 1837, from the papers of the late T. E. Bryant, Esq., was read. The patient was four feet seven inches in height, and rachitic; the antero-posterior diameter of the pelvis was two inches and a quarter in the dry state, and the transverse diameter four inches. The operation was accomplished without difficulty; but the mother died about thirty-six hours afterwards, of low peritonitis. The child lived some weeks, when it died of erysipelas.

Dr. GREENHALGH had had some experience of the Cæsarean operation, having performed it four times; having been present in three cases where other practitioners had operated; and having recently, through the kindness of Dr. Winckel of Gummersbach, examined three women who had been the subjects of this proceeding. He expressed a conviction that in difficult cases of craniotomy, which were necessarily fatal to the children and too often to the mothers,

the lives of most of the former would be spared, and the latter would stand an equally good chance, by the timely performance of the Cæsarean section. He detailed the case of a woman upon whom he had operated, who was reduced to such an extreme degree of debility by mollities ossium that those present considered it impossible that she could survive the operation; notwithstanding, she lived three weeks afterwards, and then died from rupture of the transverse colon, owing to the distortion occasioning occlusion of the rectum. The child was born alive, and continued to live. Dr. Greenhalgh strongly urged the early performance of the operation, before the membranes were ruptured or the mother exhausted. He considered that the incisions should be made in the linea alba, and as nearly as possible through the centre of the body, and not through the neck, of the uterus; in which, although there were fewer large vessels, yet there was far less contractile power, and consequently a greater liability to hæmorrhage, as happened in one case which he witnessed. The abdominal and uterine wounds should be held together by the fingers of an assistant, placed within the extremities of the incisions; immediately after the extraction of the fœtus and secundines, the finger should be passed from within through the neck of the uterus into the vagina, so as to secure a free exit for the discharges; the uterus should be firmly grasped by the hand, so as to obtain its firm contraction; and, when all fear of hæmorrhage had passed, the abdominal wound would be brought together by the interrupted suture, and still further secured by broad strips of adhesive plaster. As a rule, he administered no medicine, but met each symptom by its appropriate remedy. He mentioned one extraordinary case where the patient was up and about five days after the operation; she was, however, the subject of an enormous umbilical hernia.

Dr. BARNES observed that summaries of most of Dr. Winckel's cases would be found in the *British and Foreign Medico-Chirurgical Review*.

Dr. PLATFAIR said that in the only case of Cæsarean section which he had witnessed, a difficulty was met with which he had not seen alluded to in descriptions of the operation, and which certainly had not occurred in the case under discussion, nor apparently in any of those described by Dr. Greenhalgh. In the case in question the uterus was opened near the fundus; and although no time was lost in removing the child, still the uterine parietes contracted with such rapidity and force that the head was caught in the incision, and some difficulty occurred in extracting it and the placenta. This was doubtless a fault on the right side, as it diminished the risk of hæmorrhage; but still it would be well to know how to avoid inconvenience from it. He had thought this might be done by commencing the incision near the lower part of the uterus, instead of at the fundus, when the head might be extracted first. The case to which he alluded also showed the risk of delay before operation. The patient was a healthy woman who might have done well, but she was allowed to remain so many days in labour before further advice was sought, that when seen the vagina was found in a state of slough.

Dr. OLDHAM recommended the incision to be made towards the lower part of the uterus.

*Obstetric Binder.* Dr. EASTLKE showed an Obstetric Binder, for immediate use after parturition, which he had constructed, and which had been made by Mr. Salmon, of Wigmore Street. It was intended to supersede those which lace up like stays. The binder was very simple in its arrangement. It consisted of two parts, which were fastened in front with the greatest ease in less than a minute by means of four lappets with hooks and eyes. It had also a tail bandage which fastened before and behind, and was able



to support the diaper and keep the binder in its place. Dr. Eastlake had tried it several times with great satisfaction. The price was from five shillings.

*Deformity.* A description of a case of Deformed Arms was read, from Dr. Shortt, accompanied by photographs.

*Missed Labour.* By A. WYNN WILLIAMS, M.D. The author alluded to the little notice the subject had received hitherto, and thought the profession indebted to Dr. McClintock for his collection of cases. He wished, however, that some more practical rules were laid down. He then detailed two cases which he considered were of this class. He ventured to suggest that, as soon as attention was called to a case, the accoucheur should, after satisfying himself of the escape of the liquor amnii, the death of the fetus, and the dilatibility of the os, proceed (after allowing a reasonable delay, and after employing the recognised means adopted to cause contraction of the uterus) to turn and deliver.

Dr. BARNES said there was a perfectly ready and safe way of dilating the cervix should the case require it. Should the cervix be rigid, besides the dilators, he would use incisions, which plan he had employed in a case he detailed.

Dr. GREENHALGH did not consider that Dr. Williams' cases could be placed under the head of missed labour, and asked the President, who was the first to use the expression, what he considered the correct definition of the term. He (Dr. Greenhalgh) had never met with a case of missed labour.

Dr. OLDHAM said that he had used the term as the most appropriate he could find. It was a case in which the time of natural labour passed by without any pains, and the child was not expelled.

Dr. BRAXTON HICKS thought it highly important to be certain that the full term had really expired, as it was very difficult to say whether it had been reached in any case before a month at least had elapsed. In the cases recited, he thought that probably, although the children were dead, they would in due time have been expelled by natural efforts.

Further discussion arose, in which Dr. Fox, Dr. Eastlake, and Mr. Owen joined, and to which Dr. Williams replied.

Mr. GANT then gave a careful dissection of the pregnant uterus in a person who had died from "accidental hæmorrhage."

*DONATION.* J. C. Bowring, Esq., has given to the Devon and Exeter Hospital £4000; the income to be spent in keeping up a ward for infants under seven years of age.

*GRATUITOUS MEDICAL SERVICES.* The practice of gratuitous medical services in public institutions, has so long been the habit of the profession, and has come to be so thoroughly interwoven with its operations and spirit, as almost to be regarded as a part of its ethics, and sustained by a sort of *esprit de corps*. In this we believe our noble profession stands alone. But not only do the physicians and surgeons of many of these institutions give their time, their skill, and their labour without pecuniary recompense, but they also deprive their brethren outside of the institutions, as well as themselves, of no inconsiderable amount of income which is rightly theirs. The amount contributed, in the shape of professional services, to the support of public charities, will be found on examination almost incredible. Several years ago it was estimated, if we remember rightly, to amount annually to about 2,000,000 dollars for the City of New York. (*American Medical Times*.)

## Correspondence.

### SECTION OF THE INTERNAL MUSCLES OF THE EYE.

LETTER FROM HENRY HANCOCK, ESQ.

SIR,—In your number for October 22nd, 1864, Mr. Vose Solomon labours very hard to deprive me of the credit of originating the operation for the relief of certain diseases of the eye, by division or section of the ciliary muscle; and, in pursuance of his object, makes frequent reference to a paper written by himself, in the *BRITISH MEDICAL JOURNAL* for 1863, vol. i, page 451; and gives a series of what he terms categorical answers, containing assertions so reckless, and contrary to fact, that I shall feel obliged by your giving me the opportunity of reply.

For the sake of convenience, and to prevent misunderstanding, I will offer my replies in detail, in the order in which the assertions are made.

*Assertion 1.* "Myotomy of the ciliary (the term myotomy being restricted to the sense in which it was understood prior to the introduction of subcutaneous section of muscle) originated, without question, with Mr. Whyte, in the year 1801." Whyte cut the muscle transversely behind the iris."

*Reply.* It is certainly a very remarkable—a perfectly original idea, and one which I venture to say is quite unprecedented, either in surgery or in any other science, to make a man the originator of an especial operation for the division of that, of the existence of which he has not the slightest conception. Mr. Whyte did not know that there was such a muscle in the eye as the ciliary muscle; nor did any one else, until the year 1847, when Mr. Bowman first demonstrated its true character. But, if Mr. Whyte had known it, even if he lived in the present day, he could not possibly cut the muscle transversely behind the iris; because it does not exist in that situation to be cut. Mr. Whyte does not make the slightest allusion to the ciliary ligament or ciliary bodies; his sole object was to evacuate the aqueous humour. His paper (*Medical and Physical Journal*, vol. vii, page 209), is entitled, "The Mode of Managing Ocular Inflammations" arising from exposure of the naked eye to the intense heat and vivid rays of a nearly vertical sun. After alluding to the consequent enlargement of the aqueous humour, and the anterior section of the orbit," he adds, at line 28, page 210: "I would have pierced through the tunics with a couching needle, and, entering the posterior chamber of the aqueous humour by an incision parallel to and behind the iris, permitted an outlet proportioned to the existing expansion." He does not give any diagram, but says, "that by this procedure he had extracted cataracts." Mr. Vose Solomon therefore concludes, that Mr. Whyte cut through such and such parts, and employed the same instrument for making the puncture as for extracting the cataract; and he accordingly favours his readers (*BRITISH MEDICAL JOURNAL*, 1863, page 450) with an imaginary diagram, in which Mr. Whyte's couching needle is represented as a weapon something between an ivory vaccine point, and a bleeding lancet, in shape and size. This is the sole foundation upon which Mr. Vose Solomon puts forward his assertion, "that myotomy of the ciliary (muscle) originated without question, with Dr. Whyte, in the year 1801." I leave it to the profession to decide, whether his assertion is not as imaginary as his diagram.

*Assertion 2.* Myotomy of the ciliary has also been practised "by Von Grafe, in the performance of iridectomy for glaucoma, 1856-7. In this operation,

the muscle is cut *transversely*, and in front of the iris."

*Reply.* Truly, the ciliary must be a most surprising muscle; for, according to Mr. Solomon, it pervades all parts of the eye. First, we have Whyte cutting it through *behind* the iris; next, we have Von Gräfe cutting it *transversely* in front of the iris; and we shall soon have Desmarres, according to the same authority, cutting it through at nearly a quarter of an inch posterior to the iris, and even further back than that.

Be this as it may, Von Gräfe did not divide the ciliary muscle intentionally, or with any definite object. I believe, and I have published my belief, that the success of iridectomy depends upon division of the ciliary muscle, and not upon the removal of any portion of the iris. I have also published my firm conviction that, sooner or later, the correctness of this opinion will be admitted; and that the mutilation of the iris will be discontinued. But Von Gräfe and his disciples take quite a different view of the subject. They ignore the division of the ciliary muscle altogether; they attribute the success of iridectomy to the removal of more or less of the iris; and therefore, to assert that Von Gräfe practised myotomy of the ciliary muscle in the performance of iridectomy for glaucoma in 1856-57, is altogether incorrect.

*Assertion 3.* "Without question," Dr. Desmarres "first methodised and practised division of the ciliary muscle for the relief of glaucoma, in the sense in which the terms division, etc., are employed by Mr. Hancock; viz., a puncture or incision of muscle made *parallel* instead of at a right angle with the course of the principal fibres. Dr. Desmarres, in 1847, illustrated the subject clinically, under the title of *Paracentesis of the Sclerotic*, in his *Traité des Maladies des Yeux*."

*Reply.* It will scarcely be credited, after reading the above, that Dr. Desmarres does not say one syllable, either clinically or otherwise, about making the incision in the course of the fibres of the muscle. This will readily be seen by the following extract from page 775 of the edition of Desmarres' work, quoted by Mr. Solomon.

"We may perform paracentesis of the eyeball in several situations. When, after a needle-operation for cataract, we would simply give issue to the aqueous humour, by plunging an instrument (grooved on purpose for facilitating the flow of fluid) through the sclerotic, at three or four *millimètres* from the cornea, in the triangular space comprised between the external and inferior recti muscles. When, on the contrary, the operation is performed for the purpose of relieving the eyeball of a collection of fluid, such as obtains in subretinal dropsy, we should then introduce the needle much further behind the cornea; sometimes between the external and inferior, and sometimes between the internal and inferior recti muscles." M. Desmarres, it will be observed, does not here say one word as to the direction in which the incision is to be made; indeed, the only place where, in reference to paracentesis scleroticæ, he alludes to the subject, is at page 578, where, in enumerating the advantages attending the first stage of his own method of depressing the lens in cataract, he remarks: "In performing depression, as I am about to propose, we in the first place allow the aqueous humour to escape, and, should inflammation supervene, we can again evacuate the fluid without difficulty; so that here we have an easy method of combating the swelling and inflammation of the interior of the eyeball." He then proceeds to describe that a small section should be made through the sclerotic, about 4 *millimètres* long, and 4 or 5 *millimètres* from

the cornea, but in the *transverse*, or exactly in the *opposite direction* to that in which Mr. Solomon asserts he makes it. In no single instance in his observations upon paracentesis scleroticæ, does he illustrate, either clinically or otherwise, that the incision should be made parallel with the course of the radiating fibres of the ciliary muscle; and the only diagram in which he at all illustrates this fact, is in figure 48, page 579, wherein, as I have said before, it is delineated as made transversely, but so far behind the radiating or principal fibres of the ciliary muscles, that they could not possibly be divided.

Dr. Desmarres "illustrates the subject clinically" by three cases only: one in the section on paracentesis scleroticæ, page 775; the second at page 586; and the third at page 588 (I give them in this order as, in relating the first, he refers to the last two.) In all three, paracentesis scleroticæ followed in a few days the needle operation for cataract.\*

In the first case (page 775), he does not define how, when, or in what direction the puncture was made; but in the last two, he distinctly states, as indeed he does in the first, that his sole object was to evacuate the aqueous humour; and that, to effect this, he *reopened the wound (je rouvris la plaie)* in the sclerotic made in the preceding operations for cataract. Mr. Solomon is equally incorrect in asserting that I make the incision parallel with the course of the radiating fibres of the muscle. I do no such thing. I make the incision, as I have, in my several published papers, always recommended it to be made obliquely across, thus cutting through not merely the radiatory, but also the circular muscle.

*Assertion 4.* Desmarres' practice was introduced into London "by Mr. Hancock, who commences his incision or puncture rather nearer to the margin of the cornea; but in all other particulars, carries out to the letter the directions given by the Parisian oculist."

*Reply.* I can most conscientiously inform Mr. Vose Solomon, that I have not the slightest wish or intention of pirating other surgeons' discoveries. Dr. Desmarres never operated for myotomy of the ciliary muscle prior to the year 1859, when I first brought that operation before the notice of the profession; it must, therefore, be evident to all that, in so doing, I could not possibly have introduced Dr. Desmarres' practice into London. Dr. Desmarres performed his operation solely for the evacuation of fluid; I perform mine expressly to cut through a particular muscle. He makes his incision transversely, and so much behind the ciliary muscle that he cannot possibly cut it. I make the incision obliquely through the muscle, and consequently much nearer to the cornea, as otherwise I should not reach the muscle at all. But this assertion is completely negated by the following extract from a letter, sent to me by Dr. Chepmell, late House-Physician to King's College Hospital, dated Paris, 9th March, 1860.

"Dear Sir,—I have been much interested by the account given recently in the *Lancet*, of your operation for the cure of glaucoma, and struck by its decided advantages over that of M. de Gräfe, here so generally adopted. A few days ago, I drew Professor Desmarres' attention to the subject, and at his request translated into French the aforesaid reports. In a clinical lecture to-day, he made very favourable mention of the operation; and expressed a desire to give it a fair trial, comparing the results with those of iridectomy. As, however, M. Desmarres seemed to apprehend some difficulty in avoiding the lens, and

\* It is very surprising that, when he was about it, Mr. Vose Solomon did not assert that all those who had ever performed the needle-operation for cataract, had "methodised and practised division of the ciliary muscle."



in dividing the fibres of the ciliary muscle, owing to their direction being from before backwards, and not crossing the line of incision as described in the *Lancet* report, would it be asking too much to request of you to entrust me with a very precise and minute account of your mode of proceeding, of the point of entry of the knife, and of the exact direction and inclination to be given to effect the section."

With regard to the fifth and last assertion, I have only to observe that Mr. Vose Solomon's unworthy attempts to appropriate the merit of having originated the operation of myotomy of the ciliary muscle have been too frequently noticed and exposed, to require further comment from me here. I would only remind that gentleman that, in a question of this nature, he is bound to prove his point by precision and facts, and not by reckless assertion, speculative conclusions, and imaginary diagrams.

I am, etc., HENRY HANCOCK.

37, Harley Street, London, October 20th, 1864.

### THE ENUCLEATION OF EYES.

LETTER FROM ROBERT B. CARTER, ESQ., F.R.C.S.

SIR,—In your leading article on this important subject, you have founded what is, I think, an incorrect inference, although a very fair one, upon some words of mine that you quote. It is extremely probable that my practice may differ in many respects from that pursued at the Westminster Eye Hospital; but, in this particular matter, the difference is perhaps apparent rather than real.

I was senior surgeon to the Eye Dispensary at Nottingham for the first three years of its existence, during which time my colleagues and myself treated somewhere about four thousand patients. In the vicinity of Nottingham there are many colliery and other villages; and these villages, as well as the town itself, sent to the new institution an accumulation of the spoiled eyes of years. Among the cases thus contributed, there were many of complete staphyloma of the cornea, arising from neglected purulent ophthalmia in infancy, and occasioning great deformity. Where one eye had been saved, the deformity of the other was often a hindrance to the prospects in life of the patient; and the removal of this deformity was the chief indication to be fulfilled.

During a portion of the same time, I was also surgeon to a third part of the Nottingham Union, with a population of 28,000 in my district; and I found among the poor numerous cases of the same description.

The operation of abscission of the cornea, as then practised, was not so well adapted to the condition and circumstances of these patients as enucleation of the globe; and hence I usually preferred and performed the latter. As since improved by Mr. Critchett, abscission is a better operation in such cases, because it leaves a better stump.

Of course, I have removed eyes for other causes than staphyloma of the cornea; but staphyloma of the cornea, in a populous district in which no eye institution had previously existed, and in which purulent ophthalmia among the poor had been largely treated by druggists or old women, or by bathing with the maternal urine, and only taken to a doctor when the eye was lost, has been the principal reason of the large number of my operations. Any other surgeon, placed under similar circumstances, would have much the same experience; and the circumstances of London hospital practice are very widely different.

I cannot dispute your statement about the connexion between iridectomy and enucleation otherwise

than by my own experience. I have only been made acquainted with a single instance in which both these operations were done upon the same eye; and in that instance there was an interval of two years between them.

I may be allowed to point out that, in the book from which you quote, I have only advised enucleation of the eye in cases in which all surgeons would, I believe, agree in the propriety of performing it; and also that, knowing the somewhat exceptional character of my experience, I have based nothing upon it but a statement with regard to the small amount of danger that attends the operation.

In one last word, I must beg leave to question the correctness of your inference about the necessarily limited experience of a country surgeon. As far as ophthalmic practice is concerned, a "country surgeon" now in London (Mr. Woolcott) had for many years the largest hospital experience of any man in England, and, I believe, of any man in Europe.

I am, etc., ROBERT B. CARTER.

Stroud, November 5th, 1864.

### POOR-LAW MEDICAL RELIEF.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your finding space for the following letter. I am, etc.,

RICHARD GRIFFIN.

Weymouth, November 9th, 1864.

"12, Royal Terrace, Weymouth, November 5th, 1864.

"MY LORDS AND GENTLEMEN,—I take the liberty of calling your attention to a report of the proceedings of the Southampton Board of Guardians, at their meeting on November 1st, in reference to 'expensive medicines'. In the speech of the mover of the resolution, it is stated, 'it was impossible for their medical officers, with their present pay, to give to the pauper patients such expensive medicines as those referred to in the letter.' My lords and gentlemen, this is the statement of a guardian of a large and influential incorporation, and was acquiesced in by the whole Board, as is proved by their resolution. For years past your medical officers, through me, have told you the same. Surely, then, you will no longer delay to apply a remedy for such a lamentable state of things. I earnestly entreat you at once to lay down a rule by which all salaries shall be fixed, and not leave it discretionary for one Board of Guardians to give a salary which averages less than one shilling per patient, whilst another Board gives a salary which averages many shillings per patient. The latter part of the speech of the Southampton guardian is as follows:—'For his own part, he hoped to see the time when that Board had a dispenser and dispensary of its own, and when their medical officers should be paid without having to supply medicines, but simply to prescribe them; for he believed it would prove of benefit to the town by the, in many cases, restoration of their poor, to the great relief of the rates.' Your medical officers, as a body, recommended to the Select Committee on Poor Relief, amongst other things, the establishment of dispensaries. The Committee unfortunately ignored that recommendation; but now that you have a similar recommendation from a Board of Guardians of a large and important town, I pray you not lightly to reject it, as its adoption would cure one-half of the evils complained of by your medical officers, and be of vast benefit to the poor. The salaries of your medical officers should be based on three payments: 1. Pay for medical advice and attendance a certain sum, in proportion to the number of patients and distance to be travelled. 2. Pay for extra medical services, as confinements,

accidents, etc. 3. In those unions, or parts of unions, where the inhabitants are widely separated, pay your medical officers a fixed sum per patient for medicine; but in all large towns, and parishes under local acts, establish dispensaries. In the metropolis, one dispensary might serve for two or more parishes. Adopt this course, and you will remove much of the ill-feeling which now exists.

"As the General Council of Medical Education and Registration of the United Kingdom is a legally constituted body, I think it would be well to consult them as to the amount to be paid the medical officers. If you adopt this course, I feel sure you will give general satisfaction.

"I have prepared a short draft Bill on the subject of medical relief, which is intended to be submitted to Parliament next session. If you desire it, I shall be happy to forward a copy for your inspection, and, I trust, approval.

"I have the honour to be, my lords and gentlemen,

Your obedient servant,

"The Poor-law Board." "RICHARD GRIFFIN.

*Extract from the "Hampshire Independent" of Nov. 2.*

"SOUTHAMPTON BOARD OF GUARDIANS, NOV. 1. Upon the question of providing medicines, Mr. Dowman said that he doubted not the surgeons of Southampton would not think that he was saying more than he ought when he said it was impossible for their medical officers, with their present pay, to give to the pauper patients such expensive medicines as those referred to in the letter (from Mr. Hawley, a Poor-law inspector), and which were universally admitted to be almost the only specifics in certain cases. For his own part, he hoped to see the time when that Board had a dispenser and dispensary of its own, and when their medical officers should be paid without having to supply medicines, but simply to prescribe them; for he believed it would prove of benefit to the town by the, in many cases, restoration of their poor, to the great relief of the rates. He proposed, as a reply to the query, that it was, in the opinion of the Board, undesirable for the medical officers to supply any medicines whatever, but that guardians should have dispensaries, and be ready themselves to supply whatever medicines might be required. Mr. Cave seconded the proposition; it was carried unanimously."

## TREATMENT OF PARTURIENT WOMEN.

LETTER FROM G. D. R. MACCARTHY, ESQ.

SIR,—As you have lately inserted in your JOURNAL several interesting and sensible letters on the treatment of parturient women, a subject well deserving our attention, I trust I may be allowed, after many years obstetric practice, to offer my opinion.

I beg leave to say that, with all deference to the talented gentlemen who wrote those letters, I am inclined to think the chameleon is neither positively blue, nor green, nor black, nor white; but must vary according to circumstances. Nor do I think it very difficult to decide, with the proper data before us, what is pretty near the right plan in any particular case. Basing our treatment (dietetic as well as therapeutic) on the surest dictates of common sense, we shall see it needful to take into our account the patient's constitution, especially as influenced by her pregnant position, during which it may have been modified and perhaps considerably altered before the occurrence of labour by various circumstances; also, the nature—easy or severe, quick or lingering—of the labour; the amount of hæmorrhage, etc. We must, in fact, deal with the case on common-sense prin-

ciples—ordering either a low diet or a free one, as the patient is at the time strong and robust, or weak and much reduced. Again, we must be aware that there may be present in one of the latter class—even in a debilitated patient—symptoms of much feverish excitement, and subacute if not acute inflammatory action, so that even in that case a perfectly unstimulating if not a low diet would be proper. And there may have been such excessive hæmorrhage in a patient of a previously robust constitution as to require support.

Parturition is, perhaps, the greatest, and we are sure the most sudden, change of condition in the human frame, and one which would, *a priori*, but for the wisdom and goodness of the Creator, be one of extreme peril, and often fatal issue; but it is a natural and divinely appointed change; and therefore we may not wonder so much that thousands pass through it under different management, and with all sorts of diet, gruel, tea, arrow-root, broth beef, toast and water, ale, wine, etc., and yet how few deaths and even illnesses following!

But, notwithstanding this, we ought certainly to act with the greatest prudence and discrimination. I have seen a small quantity of stimulus given a few days after delivery induce great fever and danger. Of course, when speaking of the treatment of parturient females, we mean an indefinite period; that is, until the uterine system shall have so well recovered its unimpregnated condition, as not to be in danger from any great alteration in diet. I so far agree with Mr. Pope, a gentleman of long experience, that I think a moderate unstimulating diet during the first few days is the best and safest plan, and should hardly think of advising a patient to eat roast beef or any solid animal food the very next day; especially as the stomach is an organ which sympathises much with the uterine system.

I cannot but thank you for the encouragement you have given our brethren to discuss the subject, and feel therefore the more confidence in offering you my thoughts; and shall now also conclude with a bit of Latin: *In medio tutissimius*.

I am, etc., G. D. R. MACCARTHY.

Wrockwardine Wood, near Wellington, Salop, Nov. 1, 1864.

## LETTER FROM THOMAS SKINNER, M.D.

SIR,—I am disposed to think that the discussions which take place in our JOURNAL on subjects of a strictly practical nature, are of the greatest importance to the interests of the public, as also of the profession; and, although Mr. Granville is inclined to think that the correspondence of the JOURNAL "is not as useful as it might be", on account of some "looseness of reasoning" on the part of the disputants, he forgets that all men are not equally endowed with logical powers, either by birth or education. I hail with delight the present discussion; because I am confident it is pregnant with much good to all concerned.

Any one who has received his obstetric education within the walls of the University of the Scotch metropolis during the present century must view the present discussion with feelings akin to wonder; and it must be a source of great gratification to all such, to see that the English schools of obstetrics are now beginning to teach a system of treatment in the lying-in room similar to that which they themselves have been taught during so great a lapse of time.

In the present instance, the thanks of the profession are most justly due to Drs. Oldham and Graily Hewitt, for their very excellent endeavours to dissipate the starvation or "slop" system in England; but certainly they are, no more than I am, entitled



"to run off with the harness", and claim originality in the matter; and, although Dr. Inman may justly take credit for having taught his pupils the supporting system of diet prior to Dr. Hewitt having obtained his degree, with equal truth can it be said, that Professor Hamilton, in the University of Edinburgh, taught the same system *many years before he* (Dr. Inman) *was born*. So much for priority of claim.

As a pupil of Professor Hamilton's distinguished successor, and as one who has also had the best opportunities of witnessing Professor Simpson's obstetric practice, I can vouch for it that, without foolishly running into the opposite extreme, he, like his judicious predecessor, has always taught and practised a supporting, anti-slop treatment towards parturient females.

As I do not expect the above statements to pass unchallenged, I defer the other remarks which I intended to make, until the discussion is further advanced.

I am, etc.,

THOMAS SKINNER.

Liverpool, Nov. 5th, 1864.

#### LETTER FROM THOMAS POPE, ESQ.

SIR,—In his communication, Mr. Legge says, that pregnancy is not a disease. Now, diseases are of two kinds, natural and adventitious. Among the former may be classed pregnancy, small-pox, measles, etc.; and among the latter, syphilis and a host of others. Pregnancy is the primeval disease inflicted by the Almighty on Eve, in the melancholy denunciation, "And the Lord God said unto the woman, What is it that thou hast done? I will greatly multiply thy sorrow and thy conception: in sorrow thou shalt bring forth children." Here, then, is disease with a vengeance.

Mr. Legge next says, "We cannot wonder that a rigorously low diet, being considered indispensable to the treatment of severe disease by the past generation of practitioners, should by them be enforced in the management of the puerperal process." This is, I presume, an innuendo, that I of the past generation have been so blinded and obstinate as not to keep pace with the vast strides of the arts and sciences of the present century; but I can assure him that I am as docile as any one of the present generation, that long after all useful knowledge, seeking her in the highways and byways, with the fullest consideration that Physiology and Pathology should always go hand in hand.

Who is it that advocates this rigorously low diet? It is not his humble servant myself; for I offer him the same advice as in my letter of September 16th—a mildly nutritious diet for the first three or four days after parturition; and then, and not till then, *ceteris paribus*, a generous diet.

I will now adduce a case in point. A surgeon is sent for to a frost-bitten patient. The remedy is warmth; if it be immediately applied, irremediable mischief must ensue. Just so, in a minor degree, is the advocacy of a generous and stimulant diet immediately after delivery.

I will now hasten to the last part of Mr. Legge's letter, where he talks of "breast-ill"; by which, I suppose, he means inflammation and suppuration thereof. This was of very frequent occurrence when I first entered the profession; for the treatment then was what he now patronises, even among the poor, as their well-to-do neighbours generally supplied them with mulled ale and other spiced liquors; but this was so productive of mischief, that many of the giants of our profession then paved the way for that happy order of things, of which I am an humble and

truthful supporter. Who, now, ever hears of suppurating of the breast, except from bad nursing?

To Mr. Napper I would, also, say, Ponder well my letter to Dr. Hewitt; and I would further say that, if a parturient woman would never emerge from such a diet as therein recommended, her health, strength, and longevity, would be better consulted than by his plan.

To Dr. Inman, my mercurial friend, I would say, Do not recommend women to consider themselves well, and go about at the end of the first week; as you must well know the danger of such counsel. Is the uterus in a fit state for such conduct?

As regards Mr. Granville's letter, how "the conventional style of reasoning", and "the truth to which correspondents are so fond of adverting in the language of ancient Rome", to say nothing of his personalities touching our excellent editor and myself, with his very magisterial demeanour, in our number of to-day, can further the present important controversy, is to me astonishing.

The present advocates of the generous and stimulant diet at, and immediately after, parturition, are, as far as the subject has at present proceeded, of comparatively recent growth; but I hope a phalanx of our veterans will appear on the arena more qualified to set the matter at rest.

I am, etc.,

THOMAS POPE.

Cleebury Mortimer, Nov. 5th, 1864.

## Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Court of Examiners, on the 8th instant.

Clapp, Albert John, Cork  
Cox, Pierre Georges, University College  
Dutton, Thomas, Edinburgh  
Fennie, James, Middlesex Hospital  
Gutins, John, Guy's Hospital  
Jamieson, Alexander Wallace, Edinburgh  
Salter, Thomas Knight, St. George's Hospital  
Shoolbraid, David, Guy's Hospital

APOTHECARIES' HALL. On November 3rd, the following Licentiates were admitted:—

Adams, Arthur Bayley, Lynnington, Hants  
Benson, Joseph Henry, Cambridge  
Gill, George, Liverpool Royal Infirmary  
Reed, Walter Hugo, Tiverton, Devon

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH. (Double Qualification.) The following gentlemen passed their first professional examinations during the recent sittings of the examiners.

Dods, George, East Lothian  
Dods, James, East Lothian  
Forbes, Daniel, Edinburgh  
Galley, Edgar, Annan  
Grealy, John, Galway  
Hackett, Arthur, Cork  
Holmes, William, Cork  
Mackenzie, William S., Sutherlandshire  
Sullivan, Peter A., County Galway

And the following gentlemen passed their final examinations, and were admitted L.R.C.P. Edinburgh, and L.R.C.S. Edinburgh.

Alister, William, Catherwood, Donaghadee  
Campbell, Alexander Campbell, Aberdeen  
Charters, William, Dumfriesshire  
Cannellan, Edward, Cork  
Elliot, James, Yorkshire  
Graham, John MacWilliam, Mullabrack  
Henderson, Edward, Edinburgh  
McDonald, Thomas, Fife-shire  
O'Brien, Richard Dickinson, Ennis  
O'Keeffe, John, M'Naughten, County Kerry  
Rickett, Joseph Hildreth, Yorkshire  
Watson, James, Dundee

ROYAL COLLEGE OF SURGEONS, EDINBURGH. The following gentlemen passed their first professional examinations during the recent sittings of the examiners.

Johnstone, Charles H., New Brunswick  
O'Hare, Thomas, County Down

And the following gentlemen passed their final examinations, and were admitted Licentiates of the College.

Kane, Hugh Smiley, County Antrim  
Little, John Douglas, County Kerry  
Vetch, Andrew, Edinburgh

### APPOINTMENTS.

\*HYDE, George Edwin, Esq., appointed Surgeon to the Worcester Ophthalmic Hospital.

### UNIVERSITY OF OXFORD.

BRODIE, SIR R. C., Bart.  
CHAMBERS, T. K., M.D.  
OGLE, John W., M.D.  
ROLLESTON, G., M.D.  
SMITH, H. G. S., Esq. } Appointed Examiners in Medicine.

### ARMY.

HANNAN, Assistant-Surgeon J., 49th Foot, to be Staff-Assistant-Surgeon, *vice* A. Gibb, M.D.  
ORWIN, Staff-Assistant-Surgeon T. W., to be Assistant-Surgeon 19th Foot, *vice* J. Hannan.  
WOOLHOUSE, Staff-Assistant-Surgeon G. R., to be Assistant-Surgeon 19th Hussars, *vice* D. Woods.

### ROYAL NAVY.

DAVIS, William, M.D., to be Surgeon and Medical Storekeeper at Plymouth Hospital.  
DOMVILLE, Henry J., M.D., to be Deputy Inspector-General at Bermuda Hospital.  
FANFORTH, James C., Esq., Assistant-Surgeon, to Plymouth Hospital.  
FORBES, John G. T., Esq., Surgeon, to the *Victoria*.  
GORDON, William L., M.D., Assistant-Surgeon, to Portsmouth Dockyard.  
JOHNSTON, William, Esq., Assistant-Surgeon, to the *Espoir*.  
LE GRAND, F. W., M.D., to be Deputy Inspector-General of Hospitals and Fleets on the Retired List.  
LLEWELLYN, Owen J., Esq., Surgeon, to the *Magicienne*.  
M'SWINEY, John, Esq., Surgeon, to the *Formidable* (additional), for service with the Royal Marines at Deal.  
PATERSON, John H., M.D., Staff-Surgeon, to Deptford Dockyard.

### VOLUNTEERS. (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

MACKENZIE, A. R., Esq., to be Surgeon 1st Administrative Battalion Ross-shire R.V.  
VASS, J., M.D., to be Assistant-Surgeon 1st Administrative Battalion Ross-shire R.V.

### BIRTHS.

TERRY. On October 24th, at Newport Pagnell, the wife of \*Charles Terry, Esq., of a son.  
WILLIAMS. On November 9th, at 20, King Street, Portman Square, the wife of \*A. Wynn Williams, M.D., of a daughter.

### DEATH.

\*HARRISON, Philip, Esq., late of Diss, at Norwich, aged 61, on November 1.

DR. BRINTON has resigned the appointment of Physician to St. Thomas's Hospital.

QUADRUPLE BIRTH. It is stated that a woman at Leamington lately produced four still-born children at a birth.

SCIENTIFIC CONGRESS IN NAPLES. A scientific congress is about to assemble in Naples, to which all savants are invited.

BEQUESTS. A Miss Fryer has left grand donations to Edinburgh charities; viz., £6000 to the Infirmary; £2000 to the Blind Asylum; £2000 to the Deaf and Dumb Asylum; and £1000 to the Dispensary.

THE SURGEONCY TO THE LORD LIEUTENANT. We have received a communication from Mr. Butcher, to the effect that our announcement last week of that gentleman's appointment to the above office is not correct. (*Dublin Medical Press*.)

MEDICAL CORONER. Dr. Beard, assistant-physician to the Sussex County Hospital, has been announced as a candidate for the office of coroner for East Sussex, in the vacancy occasioned by the decease of F. H. Gell, Esq.

ROYAL COLLEGE OF PHYSICIANS OF IRELAND. At the late annual meeting of the College, the Rev. William Reeves, M.B., LL.D., Secretary to the Royal Irish Academy, and Dr. Aquilla Smith, were elected Honorary Fellows of the College.

THE LATE MR. JOHN LEECH was originally educated for the medical profession, and passed some time under the charge of Dr. Cockle. His genius, however, led him away from the study of diseases; and so he entered into a field of art in which he was almost without a rival.

TESTIMONIAL TO A DISPENSARY SURGEON. A piece of plate, of the value of £100, has been presented to Mr. Howitt, surgeon of the Preston Dispensary, "by a number of his friends, as a token of regard for the valuable services rendered by him to that institution during a period of nearly thirty years."

MEMORIAL TO PROFESSOR MILLER. The friends of the late Professor Miller of Edinburgh have determined that some memorial is due to him. They propose, therefore, to raise a sum such as will procure new premises for the Medical Missionary Training Institution, in which he took deep interest. Already £1000 has been subscribed.

APOTHECARIES' HALL PRIZES. At the recent examination for prizes in materia medica and pharmaceutical chemistry, annually given by the Society of Apothecaries, the successful candidates were: First, William Lively Shepard, of St. Bartholomew's Hospital, a gold medal; second, Stephen Wootton Bushell, of Guy's Hospital, a silver medal and a book.

COMMITTAL OF A DRUGGIST FOR MANSLAUGHTER. A druggist at Sleaford has been committed for trial by a coroner's jury, on a charge of manslaughter of his wife. The surgeons, who were called in when she was dying, found that she was suffering from unrelieved femoral hernia. The druggist appears to have been quite ignorant of the nature of her complaint, although he doctored her for it.

THE ARMY MEDICAL SERVICE. A notice has just been issued from the army medical department by the Director-General, setting forth that a competitive examination for commissions will commence at Chelsea Hospital on February 20th, 1865. The subjects of examination are: Obligatory—Anatomy and physiology, surgery, medicine, including therapeutics, the diseases of women and children, chemistry and pharmacy, and a practical knowledge of drugs. Optional—Comparative anatomy, zoology, and botany, with special reference to *materia medica*. Candidates having the necessary qualifications to practise medicine and surgery under the Medical Act, and not being under 21 nor above 30 years of age, are eligible.

THE YELLOW FEVER AT BERMUDA. At the military depot on St. George's Island 27 of the officers were attacked by, and 16 succumbed to, the terrible disease; while about 160 men died amongst the troops. The deaths in the town at the same time were 200 from this cause alone. Of the officers who died five were surgeons or assistant-surgeons. The officers' mess was closed, their servants being dead, or in hospital. The native nurses employed by the government in the hospital demanded and received wages at the rate of £1 per diem. The crisis of the epidemic appears at the date of the last mail to have been past.



UNIVERSITY OF CAMBRIDGE. Brailey and Lankester have been elected to scholarships for Natural Science, at Downing College; and a gratuity of £20 has been awarded at this college to Dickson, on the ground of proficiency in Natural Science. D. J. Cooke has been elected at Sidney College. The scholarships are of the value of £40 *per annum*, and will increase according to the merits of the holders. These gentlemen have entered at the respective colleges with the intention of proceeding in Medicine.

THE CONTAGIOUS DISEASES ACT. Deputy Inspector-General of Hospitals and Fleets, P. Leonard, M.D., now attached to the Royal Naval Hospital at Haslar, has been appointed by the Board of Admiralty to proceed to the various large towns having Lock wards in their hospitals, in order to make such a report as may be useful in carrying out the provisions of the Contagious Diseases Act, passed in the last session. Staff-Surgeon John L. Donnet, M.D., has been summoned to England from Lisbon, to act as chairman of a committee which is to receive and condense evidence upon the diseases in our seaport towns, so that some measures may be taken in connection with the new act of parliament to protect the health of our maritime population. The following is a list of the naval and military stations to which the Contagious Diseases Prevention Act is intended to apply. Portsmouth, Plymouth, Woolwich, Chatham, Sheerness, Aldershot, including the limits of the parishes of Pirbright, Ash, Compton, Pepper-Harrow, Frimley, Puttenham, Seale and Tongham, Elstead, Farnham, Birley, in the County of Surrey, Aldershot, Yately, Crondall, Dogmersfield, Winchfield, Hartley-Wintney, Cove, Eversley, Farnborough, Binstead, Bentley, in the county of Hants; Sandhurst in the county of Berks, Colchester, Shorncliffe, the Curragh, Cork, and Queenstown.

BULIMIA. A stone-digger, aged 24, of Lyons, was afflicted with bulimia, or insatiable hunger. His earnings being insufficient to satisfy his appetite, though he ate scarcely anything but bread, his fellow workmen used to contribute towards his support. Worn out by his sufferings from the presence of tania, which aggravated his hunger, he at last hanged himself. The most remarkable case of bulimia of late years was that of a woman who died in Paris a few years ago. She was afflicted with bulimia from her infancy, and while still a girl used to devour as much as ten pounds of bread daily. Though not in indigent circumstances, she was twice arrested for stealing bread to satisfy her hunger. She was at length admitted into the Salpêtrière, and placed under the treatment of Esquirol; but to no purpose; for she left the Salpêtrière as voracious as ever. Her hunger varied in intensity. At ordinary times, she could manage with twelve pounds of bread per day; but for three or four months of the year she would eat from twenty to twenty-four pounds; and for ten consecutive years her appetite was greatly aggravated in spring. On one occasion, when she had thought of keeping Good Friday as a fast-day, she ate more than thirty pounds of food in twenty-four hours. As she advanced in years, her appetite became depraved; and she took a liking to grass and flowers, especially butter-cups, of which she would gather and eat an immense quantity. On a *post mortem* examination, her stomach was found exceedingly small, while her liver was unusually large, and all her other viscera quite sound and of normal size. (*Galignani*.)

DR. LANKESTER ON THE BANTING SYSTEM. There is one result of diet that is at the present day exciting a large amount of public interest, and that is the tendency of the adipose tissue to become developed to such an extent as to interfere with freedom of motion

and other healthful actions of the system. The tendency to deposit fat is undoubtedly a peculiarity of some individuals of the human race, as well as of whole races of the lower animals. The breeds of sheep, pigs, and oxen that fatten fastest are most valued for the meat market. This property more often depends on a power of consuming large quantities of heat-giving foods than on any other state of the system. It is generally, therefore, a very easy thing to reduce corpulent persons, by restraining them in the indulgence of heat-giving foods. Eat no butter at breakfast, and no bread at dinner is a recipe which, when scrupulously followed out, I have generally found act favourably on stout persons. An intelligent apprehension of the general facts I have mentioned will enable persons of a little energy to reduce themselves when and as much as they please. It is, however, a dangerous practice to attempt to reduce corpulent persons by empirical means. Strong exercise, sweating, vinegar, solution of potash, and abstinence from all kinds of heat-giving food, are alike dangerous, and must sooner or later end in disease or some fatal catastrophe. On the subject of reducing corpulence Mr. William Banting has given an instructive and amusing account of his own experience in a letter which he has published. Although not very corpulent, the adipose tissue had collected in those parts of the body which interfered with the circulation, and in the course of a few weeks, by discontinuing a most injudicious and unlimited dietary for one which his medical man had the great judgment to prescribe by weight, he soon lost his fat and the inconveniences that attended its presence. It would, however, be highly injudicious for any person, unless placed under the same circumstances, to follow Mr. Banting's course of diet. The diet he pursued,—for every one who knows anything about diet must hope he is not still pursuing it,—is objectionable from many points of view. Thus, excepting salmon amongst fish, and pork amongst meats, is fanciful. Salmon contain less fat than many fish, and lean pork is not so fattening as fat mutton. The exclusion of milk from the diet is also objectionable, as milk conveys, in the most digestible form, nutritive matter to the system. Again, the exclusion of potatoes from the diet is a great mistake, as they contain mineral elements that are not so abundantly supplied from other sources. Why champagne and port are excluded from the wines, whilst sherry and Madeira are admitted, would puzzle those who looked at the dietary from its antipunguidacious point of view. There is no reason in excluding beer, if ten or twelve ounces of wine be allowed. Provided a man be not of active habits, a dietary like this might quickly plunge him into evils to which those of corpulence are a mere trifle. (*Popular Science Review*.)

#### OPERATION DAYS AT THE HOSPITALS.

|               |  |
|---------------|--|
| MONDAY.....   | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  |
| TUESDAY.....  | Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| WEDNESDAY.... | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  |
| THURSDAY....  | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Ophthalmic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| FRIDAY.....   | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY....  | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 2 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

MEETINGS OF SOCIETIES DURING THE  
NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M.

TUESDAY. Pathological Society of London, 8 P.M.—Statistical.

WEDNESDAY. Meteorological.—Geological.

THURSDAY. Harveian Society of London, 8 P.M. Clinical Discussion, "On Sore Nipples, Mammary Abscess, and Remedies for the Excitation and Suppression of the Secretion of Milk."  
—Zoological.—Royal.—Linnæan.—Chemical.

## TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

DIET OF PARTURIENT WOMEN.—We have received so many communications on the subject of the Diet of Parturient Women, that we have necessarily been forced to curtail some of our correspondents' letters. We must venture to suggest that the treatment of the question should be mainly practical.

NOT A BAD SUGGESTION.—SIR: Will you allow me to make a suggestion for the benefit of those gentlemen who are so anxious that the funds of the Association should be devoted solely to philanthropic objects: for example, to the payment of the oppressed medical man's legal expenses, to the support of the doctor's distressed widow and orphan, and so forth? I would suggest that those members of the Association who are desirous of their subscription being devoted solely to these laudable ends, should have their wish gratified; that, instead of being partakers in what they denounce as a worthless weekly journal, they should become simply scientific philanthropists. Let the Association alter its laws, so as to enable every member who prefers the philanthropy aforesaid to the JOURNAL, to have his wish indulged. And, *per contra*, let those who prefer the JOURNAL, with what they consider the great benefits it bestows on the profession, also indulge their tastes, and stick to their JOURNAL. In this way, every member of the Association would be enabled to have his tastes gratified, and exercise complete liberty of action; and, moreover, those multitudes who, we are told, would gladly join the Association, if it were not for the drawback of its JOURNAL, would be enabled at once to have all the benefits of association, which they so eagerly desire, without any compulsory payment to a JOURNAL, which they despise or dislike.

I am, etc.,

A SUGGESTIVE.

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—C. W. Chaldecott, Esq., Dorking, 10s. 6d.; J. L. Jardine, Esq. (Dorking), per C. W. Chaldecott, Esq., 10s. 6d.; G. B. Norman, Esq. (Basingford), 10s. 6d.; W. Cooke, Esq. (Tunbridge), 10s.; Dr. Sinclair (Halestead), 10s. 6d.; W. V. Howard, Esq. (Glossop), 10s.; W. V. Lush, Esq. (Salisbury Infirmary), 5s.  
Amount previously announced, £92:5:6. Received at the Lancet office, £5:15.

I am, etc.,

ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, November 9th, 1864.

COMMUNICATIONS have been received from:—Mr. HENRY JAMCOCK; Dr. THURICOM; Mr. CHARLES GAINES; Mr. JAMES ROBERTSON; Mr. T. M. STONE; Dr. R. FOWLER; Dr. RADCLIFFE HALL; Mr. R. B. CARTER; Mr. POPE; Dr. SKINNER; Mr. J. VOSE SOLOMON; Mr. G. D. MACCARTHY; Mr. S. WOOD; Mr. RICHARD GRIFFIN; Mr. GILCHRIST; Mr. SLOMAN; Dr. W. M. WHITMARSH; Dr. H. CANDLISH; Mr. J. B. CROENVEN; Dr. J. B. PITT; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Mr. CHARLES TERRY; Mr. T. A. F. SCOTT; and THE HONORARY SECRETARY OF THE EPIDEMIOLOGICAL SOCIETY.

ESTABLISHED 1848.

**Mr. J. Baxter Langley, M.R.C.S.**  
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# Addresses and Papers

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## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

### ON THE NATURE, THE VARIETIES, AND THE TREATMENT OF ECZEMA.

By ERASMUS WILSON, F.R.S.

THE great prevalence of eczema, its manifold varieties, and its undoubted increase of late years among the population, will, I hope, be received as reasons sufficient for bringing the subject of eczema under the notice of the British Medical Association.

The prevalence of eczema is so considerable, that its name has taken root among the population, even as a "household word." There is scarcely a medical practitioner in Great Britain who has not, at this moment, a case of eczema under treatment; or who, within a limited period of time, has not had such a case brought within his observation. Eczema is common to all classes of society; is restricted neither by age nor sex; is equally frequent in the male and in the female; and is met with in the infant of a few weeks old, as commonly as in those who have reached the more protracted term of human existence. In one thousand cases of cutaneous disease of every denomination, there occur 298 instances of eczema; very nearly one in every thirty, or, in other words, thirty per cent.

The varieties of eczema are so strongly defined that the ancient writers, very naturally, assigned to them different names; and these varieties, possessing separate names, came to be considered, in the course of time, as distinct diseases. The Greeks, who, in great probability, adopted the popular names of these affections, called them psora, psoriasis, lichen, and pityriasis; all of which terms represent forms of eczema.

In like manner, and with the same intent, the Romans made use of the words—scabies, impetigo, papule, and porrigo; terms which may be regarded as agreeing with the Greek appellations already mentioned; for example: psora comprehends scabies and impetigo; psoriasis and lichen\* correspond with papule; and pityriasis with porrigo.

To us, it seems that a greater source of difficulty in the way of scientific investigation, can hardly be conceived, than the appropriation of separate names to simple varieties of one and the same disease; yet, such was the case with regard to eczema; and to this cause we may trace much of the confusion into which cutaneous pathology had fallen at the time of the revival of learning, and on the clearing away of the mists of the dark ages, when learned physicians were called upon to extricate from the ruins of the Greek and the Roman literature, aided chiefly by the translations of the Arabian physicians, the descriptions of diseases of which, perchance, the exact parallel had ceased to exist among them, or had ceased to be as common as they were in earlier times; and the difficulties were increased by the absence of that art

which has contributed so much to the enlightenment of modern times—the art of printing.

In the sixteenth century, Mercurialis and Riolanus did good service to cutaneous medicine by their study of the older authors; and by their personal investigation of these diseases. Plenck and Willan advanced our information still more considerably in the eighteenth century, and laid the foundation of the greater part of the knowledge which we possess at the present time. The descriptions left by the ancients, taken by themselves, were far from being clear; the element of diagnosis by which a stranger could determine their identity was wanting; that element was supplied by Plenck and Willan. These authors noted the redness, the vesiculation, the papulation, the pustulation, the desquamation, the discoloration, of cutaneous diseases; and upon these characters they formed their arrangement or classification. The student was no longer at a loss to decide upon the diagnosis, upon the identification of a disease; he discovered the disease with certainty, and he made it his study, so that he soon became independent of the scheme which had supplied him with this important faculty. By degrees, he arrived at a position which enabled him to see beyond the limit which his masters had attained, and to discover that, however much he might owe to their assistance in giving him the power to scale the ladder of learning, there were faults in their plan; and, it must be admitted, faults of a very serious kind:—that eczema, for example, was capable of presenting all those appearances which constituted the majority of the classes and orders of these authors; that it might be represented only by redness; or by papulation; or by vesiculation; or by pustulation; or by desquamation; and, consequently, that a simple case of eczema as it occurs upon different parts of the body of the same individual was liable to be taken to represent, at the same moment, all the different classes or orders established by our authors.

Therefore, while in the hands of the ancients eczema was designated, according to the diversity of its forms, by a variety names; the classification of Plenck and Willan, at the same time that it gave us help in defining the disease, perpetuated and even increased the same evil. In the classification of these authors eczema is one while an erythema; another while a lichen; anon, a vesicle; then a pustule; or even, a squamous affection. Such are the sources of obscurity which more modern views in respect of these diseases have in great measure removed; and for which medical science is especially indebted to the labours of Hebra. We no longer divorce eczema from itself, because it is one while erythematous; another while papulous; another while vesiculous, pustulous, or squamous; but, we speak of eczema erythematosum; eczema papulosum; eczema vesiculosum; eczema ichorosum; eczema pustulosum; eczema squamosum, etc. Those designations, which were the distinguishing signs of the classes and orders of Plenck and Willan, are still retained; but instead of being the heads of classification, are made to fill the humble office of exponents of forms or varieties of a given disease.

Let us now turn to the question: What is eczema? Eczema is an inflammation of the skin, attended with alteration of its structure, and derangement of its functions. It is more vascular than in health, its vessels being in a state of congestion; its sensibility is morbidly increased, sometimes taking on the character of itching, tingling, or smarting, and sometimes that of pain; it is thickened by infiltration of serum into its tissues; is sometimes fissured and sometimes oedematous; it exudes a serous lymph at various times and in various quantity, sometimes in ex-

\* A Greek patient, who is at present under my care, suffering from eczema papulosum of the back of the hands and wrists, the lichen agrius of Willan, calls the disease "Xero-lichenes", the popular name for the disease in her own country, and the equivalent of "dry lichen".

sive abundance; the epidermis is sometimes raised into vesicles, sometimes wholly removed; and is reproduced unhealthily, so as to form muco-purulent secretions and squamæ of various size; and sometimes is replaced by a crust of greater or less thickness, resulting from the desiccation of the morbid secretions.

But eczema rarely presents all these characteristic symptoms in an equal degree; and the diversity of the symptoms; and the modification which those symptoms undergo in different parts of the skin, in different constitutions, and in different temperaments, are the foundation of its varieties. As the varieties of eczema are founded on the prominence of one or other of the symptoms of the disease, they may be easily designated and as easily recognised. For example: when the prevailing sign is redness, the eruption is an *eczema erythematosum*; when the pores of the skin are erected into the form of papulæ, the disease is an *eczema papulosum*; where there are vesicles, the variety is *eczema vesiculosum*; where excessive exudation of a serous or colourless lymph is the leading sign, the case is one of *eczema ichorosum*; where there are pustules mingled with the other signs, it is an *eczema pustulosum*; and, where, as in the chronic forms of the affection, the epidermis is scabrous and scaly, the disease is an *eczema squamosum*. These terms comprehend the principal forms of eczema dependent on symptoms; but additional terms suggest themselves naturally for different conditions; for example: the skin is sometimes cracked and fissured—*eczema fissum*. Sometimes the thickening and condensation of the diseased tissues, in a chronic stage of the affection, suggest the terms *eczema sclerosum* and *eczema verrucosum*. Sometimes the state of the part is aptly expressed by the term *eczema oedematosum*; sometimes, from the nature of the secretion, *eczema mucosum*. And, more than once, we have met with a case to which, on account of the severe pain by which it was accompanied, the term *eczema neurosum* was correctly applicable.

It is rare to find an eczema perfectly simple in its eruption, and capable of being represented singly by any one of the terms already mentioned. More frequently, two, or indeed several of the forms may be present at the same time, and sometimes even the whole. For example: in one case we may have an erythematous eczema combined with papulæ, which we should then distinguish by the name of *eczema erythematosum et papulosum* (*eczema lichenodes*); or, it might be an *eczema erythematosum et ichorosum*; or, if the exudation of fluid from the inflamed surface were the most striking feature, we should name it an *eczema ichorosum*, which might be, but in a less degree, *erythematosum et papulosum*; or even *pustulosum*. Or, the case might be one of *eczema vesiculosum et erythematosum*; or, an *eczema squamosum* (*eczema chronicum*), which is, at the same time, in part, *fissum*; and in part, *ichorosum*. These terms have the advantage of being simple, expressive, and clear; they rise to the mind as freely as the terms: red, pimply, oozy, mattery, or scaly; and, they render the narrator intelligible to every one conversant with medicine and medical language; while the commoner appellations *eczema simplex* and *eczema rubrum*, convey to the uninstructed in cutaneous pathology, either an erroneous idea or absolutely nothing at all.

Varieties of eczema are also derived from situation; from the part of the body attacked with the eruption. For example, we have *eczema capitis*; *eczema faciei*; *eczema aurium*; *eczema palpebrarum*; *eczema oris et labiorum*; *eczema axillarum*; *eczema mamillarum*; *eczema umbilicale*; *eczema inguinum*; *eczema pu-*

*dendi*; *eczema perinæ*; *eczema ani*; *eczema articulo-*  
*rum*; *eczema manuum et pedum*; *eczema dorsi*  
*manus*; *eczema palmare et plantare*; *eczema digi-*  
*torum*; *eczema nnguium*, etc. Moreover, we are  
taught by experience that in certain situations we  
shall be most likely to meet with one or other of the  
established varieties of the disease. For example:  
*eczema capitis et aurium* are commonly *ichorosum* in  
a recent attack, and *squamosum* at a later period;  
*eczema articulo-*, *eczema axillarum*, *eczema ingui-*  
*num*, and *eczema pudendi*, are also very frequently  
*ichorosum*, and sometimes *mucosum*. *Eczema* of the  
fleshy parts of the forearms and legs is not unfre-  
quently *vesiculosum*; as is also *eczema digitorum*.  
*Eczema dorsi manus* is usually *papulosum*; while  
*eczema palmare* is *squamosum et sæpe fissum*.

The extent of the eruption is also to be considered  
in designating its varieties. It may be general or it  
may be partial. When partial, the patches of the dis-  
ease may be single or multiple; they may be defined  
(*figuratum*); or diffused (*diffusum*.) Sometimes they  
suggest the idea of the dimensions and figure of a  
piece of money, *nummulari*; and sometimes they are  
bounded by a prominent ridge (*marginatum*) and  
spread by the circumference, while the inflammation  
subsides within the included area; this is especially  
the case in a curious form of *eczema marginatum*  
common in India, where it is known as the Burmese  
ringworm.

Willan and Bateman include all the varieties of  
*eczema* under the three heads: *solare*, *impetiginodes*,  
and *rubrum*, corresponding with the *eczema vesiculo-*  
*solum*, *eczema pustulosum*, and *eczema ichorosum* of our  
improved nomenclature. Hardy proposes four varie-  
ties; namely, *simplex*, *rubrum*, *fissum* (*fendillé*), and  
*impetigo*. Hebra employs the suggestive terms  
*squamosum*, *papulosum* (*lichenodes*), *vesiculare* (*so-*  
*lare*), *madidans* (*rubrum*), and *impetiginosum*.

It will be perceived that Hebra makes *eczema squa-*  
*molum* the first of his forms of *eczema*; whereas I  
take it to be the last. Let me explain. *Eczema ery-*  
*thematosum* is commonly accompanied with desqua-  
mation; and when the eruption is general, this is  
remarkably the case. Now, Hebra selects the mo-  
ment when it is coated over with scales as the type of  
this form of the disease. But, it must be remembered  
that the scales may be disposed of in a variety of  
ways; there was a time, before which they were  
formed; there is a time when they have ceased to be  
produced; there is an intermediate time when they  
may be removed artificially by dressings, poultices,  
or baths. What are we to call the disease when the  
scales and desquamation are no longer present? The  
answer is plain; the redness, the erythema remains;  
indeed, the erythema is always there; from the be-  
ginning before the scales existed, at the end, after  
they exist no more; hence, the term "erythematosum"  
appears to me to be more appropriate than "squa-  
mosum." Again, there are forms of *eczema* in which  
there is redness, but nothing deserving to be called  
scales; and, to these cases, which are numerous, the  
term "erythematosum" is especially applicable.

On the other hand, when *eczema* reaches its latest  
period, when it is chronic, there is still redness; but  
scaliness and desquamation are a more predominant  
character than redness; and it is to this period, that  
I prefer to attach the term "squamosum." *Eczema*  
*squamosum*, I regard as the chronic stage of *eczema*;  
whilst *eczema erythematosum*, which may also be  
chronic, applies with especial aptitude to the earliest  
stage of the eruption. *Eczema squamosum* is, there-  
fore, in my view of the pathological indications of the  
disease, an *eczema chronicum squamosum*, and is the  
true representative of the much abused term *psoria-*  
*sis*. *Psora* represents the more active, and especially



the exudative forms of eczema; and psoriasis, its chronic, its dry, and its desquamating form.

The Romans, who designated eczema by the name of scabies, drew attention to a characteristic distinction between its moist and its dry form—scabies humida and scabies sicca. The Greeks appear to have had the same object in view in employing the words psora and psoriasis; the former term corresponding with scabies humida, the latter with scabies sicca. The distinction is a radical one, and of the first importance in the study of eczema. Eczema siccum, which is represented by eczema erythematosum, eczema papulosum, and eczema squamosum, is specially distinguished by an absence of exudation, or by its presence in a very slight degree; whereas eczema humidum, represented by eczema vesiculosum, eczema ichorosum, and eczema pustulosum, is remarkable for the exudation of a serous and sometimes a muco-purulent fluid, often in astonishing quantity—a positive flux. According to our observation, the dry forms of eczema more than double in frequency those of the moist or humid kind; therefore, a classification that assumes for eczema a definition dependent on exudation as a pathognomonic sign, must, of a necessity, be incorrect.

A well marked example of eczema is an open page, upon which we may read, with the utmost distinctness, the pathology of the disease; and anything that may be wanting upon this page is supplied by the examination of a succession of cases. Let us note what such an observation teaches.

In the first place, there is redness: one while, uniform; another while, punctated. The cause of the redness is, congestion of the capillaries and smaller vessels of the skin. When the redness is uniform, the congestion is uniform; when the redness is punctated, the vascular plexus of the follicles is also congested. Sometimes the congestion of the vascular rete of the horizontal surface is primarily and chiefly apparent; sometimes the vascular rete of the vertical walls of the follicles is the first to show congestion, and the latest to retain it. When the latter is the case, our patients speak of an eruption under the skin; and we, ourselves, perceive a resemblance to the punctiform congestion of the exanthemata. Another phenomenon follows the congestion of the vessels of the follicles; namely, the erection of their apertures or pores: these latter become raised above the level of the adjacent surface, and constitute small pimples. This is the mode of formation of eczema papulosum.

Occasionally, we have the opportunity of observing another process by which an eczema is developed. There may exist a slight itching of a part of the skin; if the part be carefully examined, a reddish punctum is apparent in the substance of the skin; the finger passed over this punctum, discovers a hard granule; this is a congested follicle. If, to relieve the itching, we scratch the part, a papule arises; the head of the papule is torn off; a serous exudation follows, and then a small crust, which covers its summit. But, while the one original papule runs its course, the follicles around participate in the pathological process, and soon a small patch is formed, which presents all the characters of an eczema: there is an erythematous redness; there is papulation; there is slight exudation—papular at first, but afterwards general; there is incrustation, and there is desquamation.

Congestion, therefore, gives rise to redness; it gives rise, also, to papulation, and to a moderate amount of swelling; but there is another important pathological change which results from congestion, and that is effusion or transudation. The congested vessels are relieved from their distension by the exudation of the

fluid portion of the blood, and this exudation causes thickening and condensation of the substance of the skin. Sometimes the transudation from the vessels occasions œdema (eczema œdematosum); sometimes it is effused beneath the epidermis, at the apertures of the follicles, and produces vesicles (eczema vesiculosum); a continuance of this process causes the separation of the cuticle from the cutis; and the discharge from the latter of a serous lymph (eczema ichorosum). In a different constitution, or in another region of the body, the distension of the tissues of the skin may occasion cracks and fissures (eczema fissum); from which an ichorous discharge may be poured out in greater or less quantity.

There is yet another pathological operation which occurs in the morbid skin, and that is, an alteration in the formation of the epidermis. Where two folds of integument have lain in contact for a while, and where, from the constant presence of heat and moisture, the cuticle has no power of acquiring its natural horny density, but remains soft and cellular, the surface of the derma is red, is denuded of epidermis, and secretes a copious muco-purulent discharge, which is, in reality, an aborted and morbid cuticular substance; a cuticle arrested at its cellular stage and partly transformed under the influence of inflammatory action and the low vitality of the part, into a fluid, which is principally mucus, but is mingled with a small proportion of pus. There is no lesion of continuity, or destruction of the epidermis, in this case; the muco-purulent matter is a simple secretion produced at the expense of the epidermis, a morbid conversion of that tissue into a fluid matter, which performs the same office to the otherwise unprotected derma, as that of mucus to the mucous membrane. This is intertrigo mucofluens; or, more properly, eczema mucosum.

Now, in ordinary eczema, a morbid alteration in the formation of the cuticular tissue takes place, similar to that just described. The copious exudation of eczema ichorosum is not merely a serous fluid expelled from the vessels in consequence of the over-distension of their parietes; it is a positive secretion in which the cellular elements of the cuticle take an active part, and bestow upon the fluid its special properties—for example, its density and frequent opalescent appearance. That same influence which causes the discharge of such immense quantities of fluid from the mucous membrane of the bowels in diarrhoea and cholera, is also active in eczema ichorosum. In the course of a few hours, several pints of fluid may be poured out from the denuded surface of the derma, partly, no doubt, by way of excretion, but not less actively also by way of secretion.

The pathological phenomena present and in operation in eczema, therefore, are not simply those of inflammation, but also involve a morbid aberration of secretion. The inflamed derma, which, at an early period of the disease, exudes largely a colourless lymph, at a later period may exude an opalescent and even a yellowish fluid; the consequence of the conversion of the mucous elements of the cuticle into pus. And the continuance of inflammation of the skin may so far lower the vitality of the surrounding tissues, that pustules may be developed around the circumference of the patch of eruption, and add fresh purulent matter to the morbid secretion; the case is, then, one of eczema pustulosum, or eczema impetiginodes.

In a disease of a secreting tissue, where inflammation is apt to continue for a considerable period, and where secretion is so greatly disturbed; where exudation takes place as the result of inflammatory changes, and as the result also of modified secretion,—we may expect to find crusts of various kinds

formed on the inflamed surface; some resulting from the desiccation of altered secretions, and some from imperfect formation and altered structure of the epidermis. It is in the power of the medical man to prevent these crusts from appearing at all; but where the case has been left to itself, or where the treatment has been misdirected, we may find spongy crusts of a greyish, yellowish, greenish, or brownish tint, or almost black; we may find them loose or adherent; we may find scabs of various degrees of density; or we may find, where alteration of the epidermis is chiefly concerned, scales of various thickness and magnitude—thicker, larger, and rougher in more recent cases; thinner and smaller in more chronic forms; and diminishing by degrees to the furfuraceous and farinaceous desquamation of psoriasis or pityriasis.

Eczema is a chronic affection, and has no specific course. Like other chronic inflammations, it has its beginning and its end; or, in other words, its rise and its decline, with an intervening period of activity of greater or less duration. In a severe case, the rise may present redness, heat, swelling, papulation, and sometimes vesiculation; this may be regarded as a first stage or first period of the disease. Next, there may succeed exudation, incrustation, and sometimes suppuration; this is a second stage, or second period—the stage of exaltation. Lastly, there will follow the third stage—the stage or period of decline—comprising desquamation, with redness and often thickening of the skin. We may regard such an example as a typical case of eczema; but the disease very rarely runs its course so simply. The first stage may linger on, and be lost eventually in the last, without the intermediate pathological phenomena; or the whole course of the eruption may be a successive repetition of the intermediate stage, without any alteration of the first. Even the last stage may exist in the form of thickening and chapping, without any preceding first stage. It is this great diversity of eczema in pathological characters that is assumed as the distinction of its varieties, and which contributes so much to the obscurity of diagnosis of the disease; whilst its irregularity of course enhances the difficulty of treating it successfully. It may be correct, therefore, to speak of a first, a second, or a third period of eczema, in relation to a given attack of the disease; but not so in relation to eczema in general; for, as we have endeavoured to show, in the great majority of examples of this affection, the regular succession of stages or periods is wanting; and it will be found more correct to employ the terms previously suggested as the proper designation of the forms of the disease. Again, in reference to the pathological phenomena presented by the disease during its three periods, the first might be named the erythematous, the papular, or the vesicular stage; the second, the exudative and encrusted stage; and the last, the squamous or desquamating stage.

CAUSE OF ECZEMA. To conduct the treatment of eczema with success, it is necessary not only to know the habits and phenomena of the disease—in other words, its pathology—but also to be able to form some judgment as to its cause. Careful observation has convinced me that the essential cause of eczema is debility—debility of constitution, or general debility; and debility of tissue, or local debility. And further investigation has shown that constitutional debility may present itself in three forms; namely, as an *assimilative debility*, in which the organs of digestion and secretion are principally at fault; as a *nutritive debility*, where the powers of nutrition are chiefly concerned; and as a *nervous debility*, in which a morbid state of the nervous system takes the lead. In

300 cases of eczema, 278 were referable to general debility, and 22 to local debility; and of the 278 instances of general debility, the examples of assimilative debility were 143, nutritive debility 103, and nervous debility 32.

Debility stands in the position of a predisposing cause of eczema; but, as debility is itself due to certain causes, these latter must be regarded as bearing the relation of remote predisposing causes of the eruptive disease. Of the 278 cases of general debility already referred to, the remote predisposing causes, taken in physiological order, admit of being arranged under twenty-four heads, as follows: 1. Hereditary diathesis; 2. Strumous diathesis; 3. Weakly parentage; 4. Errors of diet; 5. Errors of hygiene—namely, air, exercise, cleanliness, and clothing; 6. Vicissitudes of cold, heat, and moisture; 7. Transitions of seasons; 8. Ungenial climate; 9. Excessive labour mental and physical; 10. Anxiety and affliction; 11. Sexual excess; 12. Vaccination; 13. Dentition; 14. Excessive growth; 15. Deranged digestion; 16. Deranged menstruation; 17. Uterine, reproductive, and puerperal derangements; 18. Fevers, eruptive and malarious; 19. Gouty and rheumatic diathesis; 20. Constitutional and organic disease; 21. Nervous shock and fright; 22. General cachexia; 23. Hæmorrhage; 24. Local injury or disorder.

If we consider them in the order of their numerical importance, the arrangement in reference to the leading remote predisposing causes would stand as follows: Deranged digestion, 51; errors of diet, 33; weakly parentage, 21; vicissitudes of cold, heat, and moisture, 21; anxiety and affliction, 16; hereditary diathesis, 16; ungenial climate, 14; constitutional and organic disease, 14; excessive labour, mental and physical, 11; uterine, reproductive, and puerperal derangements, 11; errors of hygiene, 10; gouty and rheumatic diathesis, 8; deranged menstruation, 7; fevers, eruptive and malarious, 7; excessive growth, 7; vaccination, 7.

In reference to the three subdivisions of the remote predisposing causes—namely, assimilative, nutritive, and nervous—the most numerous remote predisposing causes of assimilative debility are met with under the heads of—deranged digestion, 49; vicissitudes of cold, heat, and moisture, 13; constitutional and organic disease, 12; and anxiety and affliction, 11. The chief remote predisposing causes of nutritive debility occur under the heads of—errors of diet, 28; weakly parentage, 13; hereditary diathesis, 12; vaccination, 7; excessive growth, 7; and errors of hygiene, 6. The most numerous remote predisposing causes of nervous debility are met with under the heads of—anxiety and affliction, 5; excessive mental and physical labour, 4; ungenial climate, 4; uterine, reproductive, and puerperal derangements, 4; nervous shock and fright, 3; weakly parentage, 3; and vicissitudes of cold, heat, and moisture, 3.

After the remote predisposing and the predisposing causes of eczema, follow the exciting causes, which are best illustrated by the group of local causes. Of the twenty-two cases referable to local debility, the exciting causes admit of being assembled under the following heads; namely, cold; heat; moisture, with cold or heat; clothing, bedding, etc.; friction; local irritants; local injury; varicose veins. The most important groups in numerical value were, cold; local injury; heat; local irritants; and varicose veins.

TREATMENT OF ECZEMA. If the foregoing premises with regard to the causes of eczema be correct, the treatment of eczema resolves itself into a treatment of debility—a treatment of constitutional debility, and a treatment of local debility; and the influence which we are called upon to exercise over our patients is one which shall have for its object to restore



power, and thereby to regulate function and to confirm health; for health is nothing more than correct function united with normal power.

In general terms, our constitutional treatment must be directed to the regulation of the functions; and, concurrently with regulation of functions, to the restoration of the tone, the vigour, the vitality of the general system. In the most numerous group of cases, those which depend upon debility of assimilation, our attention is principally directed to the digestive organs and the secretions. In the next most numerous group, those which are due to nutritive debility, the digestive and secreting organs must also be carefully examined, although they are less likely to be faulty than in the preceding group; and we are enabled sooner than in the former case to resort to our strengthening remedies. The same remarks apply to the third group, originating in nervous debility; while, in these latter, we have to deal with the special indication of weakened power of the nervous system.

A more particular direction is given to our treatment by the recognition of the remote predisposing cause. The commonest of the remote predisposing causes of eczema we have seen to be derangement of digestion and errors of diet; we have but to include the consideration of these causes in our general treatment for regulating the digestive organs and secretions and restoring tone, and our treatment will be complete.

Next to the preceding comes a group of causes in which the laws of hygiene have been infringed: for example, vicissitudes of cold, heat, and moisture; errors of air, exercise, cleanliness, and clothing; climate; and seasons. These various causes are too suggestive to call for special comment. The same may be said of another group of remote predisposing causes; namely, weakly parentage, hereditary diathesis, and strumous diathesis. Then comes a group, of which labour in excess, both mental and physical, together with anxiety, affliction, nervous shock and fright, and mental distress of every kind, are the leading features. Next we have debility proceeding from the morbid operation of functions natural to the body: for example, dentition; excessive growth; and sexual excess. After these, there are the disorders of female functions; deranged menstruation; together with uterine, reproductive, and puerperal derangement. And, lastly, there is the debility which is due to the existence of other diseases: for example, vaccination; general cachexia; eruptive and malarious fevers; gout and rheumatism; hæmorrhage; and visceral disorder.

The question, therefore, How shall we treat a case of eczema? is not so simple in one sense as might be imagined, inasmuch as it demands a lengthened inquiry into constitution and cause; but simple enough in another sense, because it involves no more, but quite as much, as the treatment of any other disease to which the human constitution is liable. To treat an eczema judiciously and correctly, we must know the sex and age of the patient, together with the predisposing cause, the remote predisposing causes, and the exciting cause of the disease. It may be that our treatment must be directed to the restoration of digestion and secretion; or to the strengthening of an exhausted vitality; or to combating an inherent and inherited weakness; or to the improvement and sustenance of defective power; or to the regulation of disorders of the female system; or to the cure of visceral or of organic disease. In a word, the highest and best qualities of medical art and science must be put in practice, with foresight and discretion, for the treatment of an eczema; the universal must submit to become the handmaiden of the special.

The agents of the constitutional treatment of this disease, our remedies, belong chiefly to the class of aperients and tonics; while, as adjuvants, we have recourse to sedatives, alteratives, and stimulants. Our best aperients are: sulphate of magnesia; and the purgative extracts, either alone, or when specially indicated, united with blue pill or calomel. These remedies clear away accumulated ingesta and secretions from the alimentary canal; they restore a torpid and lethargic function, in this sense performing the part of derivatives from the inflamed tissues; and they promote healthy secretion. But aperients require to be used with great judgment; they must neither be carried too far, nor continued too long; our object should be to imitate nature as closely as possible; and above all, to avoid lowering the powers of the constitution. Nothing reanimates the energies of the organism so much as the healthy operation of the natural functions of the body; this should be our aim; and, when so applied and skilfully used, an aperient, instead of producing exhaustion, becomes a powerful tonic to the entire frame. The sulphate of magnesia in small doses possesses all these good qualities; it restores the function of the alimentary and urinary mucous membrane, and agrees with most constitutions. Some there are, to whom the warmer aperients or the mineral purgatives are more suitable; but this is a matter that can be determined only by observation. Again, we are influenced in our selection of an aperient, often by the season, and often by some collateral object, such as derivation; in the spring and summer saline aperients and neutral salts may be indicated; whereas, in a colder season we should prefer the warmer remedies; and, in seeking for a derivative we should possibly prefer aloes to Epsom salts.

Besides their direct effects of removing obstacles and promoting normal secretion from the mucous membrane, aperients have the property of rendering absorption and nutrition more active. How usefully, on many occasions, do we put this property of aperients to a purpose in removing effusions into the tissues, in carrying off waste humours, and stimulating nature to be more eager in the assumption of fresh material. It is marvellous, how much may be accomplished by the judicious use of remedies; and with what certainty the results, which we seek to obtain, may be secured. If we run the eye down our list of remote predisposing causes, other remedies suggest themselves which may be combined with our aperients to adapt them to a particular purpose; let us instance rheumatism, which draws our thoughts towards the iodide of potassium; gout, towards colchicum; and uterine diseases, towards alkalies and iodine.

If we turn our attention, in the next place, to the tonics, which may be found suitable for the treatment of eczema, we find: simple vegetable bitters, cinchona and quinine, chalybeates, the mineral acids—hydrochloric, nitric, sulphuric, and phosphoric; and above all, arsenic. Among simple vegetable bitters, with what respect must we speak of gentian, calumba, orange-peel, quassia, chirayta, chamomile, and hop; in infusion or decoction; in extract or in tincture; in combination with the mineral acids, or with ammonia, soda, or potash. How admirably cinchona and quinine perform their part; cinchona in decoction or tincture, or liquor, with sulphuric acid or with ammonia; and quinine in solution, with an excess of sulphuric acid. How perfect a remedy is one grain of quinine, with one drachm of sulphate of magnesia, seven minims of dilute nitric acid, and an ounce and a half of infusion of roses, both as a gentle aperient, a corrector of acidity, a promoter of mucous secretion, and as a tonic. Then the chalybeates, iron and its salts, the sulphate, the tincture of the hydrochlorate,

the citrate, the superphosphate, the iodide, and the citrate of iron and quinine. Next, the mineral acids combined with the bitter tonics, and especially the nitro-muriatic and the phosphoric. Again, as a nutritive tonic, we have the cod-liver oil; and our list of remote predisposing causes will discover several sections in which that remedy is peculiarly applicable; for example: strumous diathesis, excessive growth, and sexual excess.

All that precedes applies to any disease of the human frame; whether it be of the lungs, the heart, the liver, the brain, the kidneys or the womb; the treatment now under consideration is catholic and not special; its aim, to bring back normal function, and so to restore health; it is the routine of the physician's art; but there is a remedy which possesses a special influence on the skin, and has long been held sacred in cutaneous medicine, namely, arsenic. When all has been effected that can be accomplished by aperients, alteratives, derivatives, and tonics, then comes the reign of arsenic; and at that moment, arsenic is triumphant. But arsenic must be regarded, not as our common weapon, but as our reserve; to be administered when it can do no harm, and when there is every probability of its doing good. Arsenic is a tonic, a tonic which influences chiefly the nerve-substance, and not only gives force to, but improves the nutrition of the nervous matter; in this way it operates upon the trophic system of nerves throughout the economy; and in cutaneous medicine we have evidence of its remarkable powers upon the skin. Arsenic accelerates those actions of the skin which tend to its nutrition and renovation, and therein it becomes a healer of its eruptions, and a valuable aid to the cure of eczema. But arsenic, above all medicines, must be handled with judgment and care; it must be jealously watched, lest it give rise to any unfavourable symptoms, and its use must be suspended at once if there exist even a doubt of its healthful operation. Above all, it is to be borne in mind that only at the right moment is arsenic applicable, and that right moment can only be determined by watchful care, or by long experience.

Our *Pharmacopœia* is rich in preparations of arsenic; but the most valuable are, the liquor potassæ arsenitis, and the liquor arsenici chloridi; the dose of the former applicable to an adult suffering with eczema, is two to four minims; and of the latter, double that quantity. Some years ago, in a paper on Eczema Infantile, I laid before the British Medical Association a formula for the administration of Fowler's solution; and experience has assured me that no better form can be employed for its administration.\* Arsenic should always be administered in small bulk, and the formula in question gives one drachm of fluid as the dose, and always on a full stomach, or, if possible, in the midst of a meal. The object of these precautions is obvious; arsenic is intended especially as an improver of nutrition, and therefore should be made to enter the stream of blood with the chyle; in its nature it is an irritant to the mucous membrane, and, therefore, it should be administered at a time when the lining membrane of the stomach is coated with mucous secretion, and at the same time when, by mixing with the mass of the meal, the remedy is largely diluted.

All the processes of renovation which depend upon nutrition are slow; hence, as we look for the good effects of arsenic in the improvement of nutrition, we must be prepared to continue its use for a considerable time. This is another reason for administering arsenic in small doses, independently of the sugges-

tions to the same effect gathered from experience. Indeed, by employing it in larger doses, we naturally frustrate the objects which we ourselves have in view; we set up the irritant action of the medicine; we excite nausea, sickness, pain in the stomach, or alimentary canal, prostration of nervous power, or cough, and then we are compelled to suspend it. While, on the other hand, administered with judgment and discretion, there is no safer medicine in the *Pharmacopœia*; and, at the same time, in my opinion, there is none to equal it in excellence and usefulness.

To be a successful practitioner in the treatment of eczema, a medical man must be an accomplished physician; to manage the local treatment with success, he must also be an able surgeon. The local treatment of eczema must be conducted according to the general principles of surgery. The inflamed part must be soothed in the acute stages of the disease, it must be supported and stimulated during the chronic stages, and it must be excited to a new action in the most chronic stage of all. To soothe, we must employ water-dressing, unguents, cerates, well adjusted bandages, and rest. To give local tone, we must have recourse to stimulant applications of various kinds.

The water-dressing is useful where there is heat, pain, itching, or tension, but should not be continued beyond the period during which those symptoms exist; for, when prolonged for too great a time, it lowers the tone of the tissues and perpetuates the eruption. In our list of remote predisposing causes, it will be seen that one amongst them is "moisture with heat," the exact condition which at one moment of the disease we employ with advantage in the use of the water-dressing. Whereas, we could hardly adopt any more certain means of producing eczema artificially, than by the application for a long time of water-dressing to a healthy part of the skin. This operation is often seen in practice, in the eruptions which follow the lengthened use of poultices.

When the local inflammation partakes of the sub-acute character rather than the acute, and when the water-dressing has effected the purpose for which it was applied, we may have recourse to cerates or ointments. As a preliminary to both of these appliances, all crusts and sordes should be carefully wiped or washed away from the inflamed part; if they be dry and hard, the water-dressing or the ointment-dressing may be applied with a view to soften them, and then they should be removed, and the dressing with the ointment nicely adjusted, and, wherever practicable, secured in position by a bandage; where this cannot be done, then we must have recourse to adhesive straps. In selecting an ointment, the best with which I am acquainted is the benzoated ointment of oxide of zinc. It should be spread thickly on the lint; the dressings should be shaped so as not to overreach the sound skin; and the roller of elastic cotton bandage should be put on smoothly, and with a view to produce equable pressure on the eruption, and support to the vessels of the limb. On a part of any extent it is more convenient, and we avoid wrinkles thereby, to apply the dressing in slips, and dispose them in the manner of a many-tailed bandage; and when a limb affected with eczema is carefully packed up in the manner described, it may be left for twenty-four hours, and in more chronic cases for forty-eight hours, without disturbance; then it should be unpacked, re-dressed, wiped with a soft napkin to remove sordes, and packed up again for a similar period. While packed up in this way, the itching of an eczema commonly ceases, and the patient is saved from the annoyance and suffering of that disagreeable symptom, while the skin returns gradually to its healthy condition. If there should be heat and burning of the limb when packed, the bandage may be

\* R. Vinî ferri 3iiss; syrupi simplicis 5j; liquoris potassæ arsenitis ℥j, aquæ puræ 5j. Misce. Fiat mistura; 5j pro dosi.



sopped with water, and then we get the advantage of the water-dressing superadded to the tonic treatment.

Where great irritability prevails in the constitution of the patient, we require to have recourse to sedatives; and where irritability is present in the part, we may find it difficult to contrive a dressing which will perfectly suit the eruption. Sometimes grease of all kinds acts as an irritant, and then we are driven for a while to the use of lotions or powders. Sometimes a sedative, such as the acetate of lead, added to the ointment, relieves the irritability; sometimes a more stimulating application, such as the unguentum resinae flavae, or the ointment of juniper tar. At other times, we may put an end to the irritability by pencilling the surface with a weak solution of the nitrate of silver in nitric ether. Again, we rarely fail to relieve the irritability by undressing the part, washing it thoroughly with the juniper tar soap, drying it, and dressing and packing it up again as before. The successful treatment of eczema needs many resources; but only such as may be explained on the recognised principles of physiology and surgery.

The erythematous form of eczema yields very kindly to the benzoated ointment of oxide of zinc; so also do the moist forms of the eruption, the dressing being aided by moderate compression with a bandage. Eczema ichororum must be followed up patiently with this plan of local treatment, until the ichorous secretion ceases to be formed, and the eruption heals. But the chronic forms of the disease represented by eczema squamosum, require a stimulant treatment. Washing with the juniper tar soap, dressing with the unguentum resinae flavae, pencilling with a solution of nitrate of silver, or a strong lixivium of potash. Whenever these stronger local remedies are used, the eruption should be subsequently dressed, *more dicto*, with the benzoated ointment of oxide of zinc, and then carefully packed up.

In the moist forms of eczema, there is always a considerable quantity of serous lymph present in the tissues of the skin; and, until that serous fluid is removed, either by absorption from within or by excretion from the part, the skin cannot return to its normal state. It is to the presence of this fluid infiltrated in the substance of the skin, that the chronic forms of eczema owe their thickening, their induration, and their rupture; the latter giving occasion to fissures and cracks, and being most conspicuous where the skin is naturally thick and wrinkled, as on the hands and fingers, or the feet, behind the ears, along the borders of the mouth, and in the cleft of the podex. For this state of the skin, in an aggravated form, there is no remedy to compare with a solution of caustic potash. That application seems to purge the skin of its abnormal fluids, to promote absorption, and to give energy to nutrition; and it is amazing with what rapidity the cracks will heal, and the most chronic state of disease get well under this treatment.

**MEDICAL STUDENTS IN PARIS.** The number of medical students is decreasing in Paris, as well as in London. In 1863, the number of new students was 357; in 1864, it is 327.

**THE LAVIES TESTIMONIAL DINNER.** We wish to remind our professional brethren that this dinner is advertised for Wednesday next, the 23rd, at Freemasons' Hall. We hear that a large gathering is expected; amongst others, John Brady, Esq., M.P., J. Tidd Pratt, Esq., R. Lush, Esq., Q.C., Dr. Copland, Henry Hancock, Esq., John Erichsen, Esq., etc.

## Transactions of Branches.

### HULL BRANCH,

#### A PECULIAR CASE OF LITHOTOMY.

By KELBURNE KING, M.D., Hull.

[Read October 27th, 1864.]

On October 26th, 1863, I was summoned by Mr. Burnham, surgeon, of Preston, in this neighbourhood, to go to that village, and to take such instruments with me as I would require for the operation of lithotomy. Dr. Sandwith of Hull accompanied me. On arrival, we found our patient to be a farm labourer, about seventy years of age; and we received the following account of his history.

Thirty years ago, he had been operated upon for stone in the bladder, by the late Mr. Fielding of Hull; and shortly afterwards found his symptoms return. Since the time of the operation, he had never been able to pass urine through the urethra, but evacuated the bladder through the fistula which remained in the perinaeum; and of late, since his symptoms became aggravated, he thought that a great part of the urine passed through the anus. He was in an extremely emaciated condition; was in great and constant pain; and was so reduced by suffering, that he was glad to submit to anything that might be proposed for his relief.

On examination, the urethra was found to be occluded, and perfectly impermeable to any instrument which I had with me. There were several sinuses in the perinaeum; and, on passing the finger into the rectum, I found that a fistulous opening existed about two and a half inches from the anus, opening into the bladder, and permitting the finger to touch a calculus. From this examination, it appeared that the calculus was of very great size, as it could be felt in all directions, filling up the space usually occupied by the bladder.

As no staff could be passed, and the man was reduced to a state of the greatest misery and depression, the following operation was performed, after consultation with Dr. Sandwith and Mr. Burnham. I passed the index finger of my left hand into the bowel, and placed its point upon the stone; then introduced a strong, straight, probe-pointed knife through the anus, and passed it up to the finger already introduced, turning the sharp edge forwards. An incision was then made through all the soft tissues—bowel, sphincter, and perinaeum—strictly in the middle line, from the sinus in the rectum to about an inch in front of the anus. Free scope being thus afforded, the forceps were introduced; and it was found that the stone occupied the whole interior of the bladder, which seemed to be moulded, as it were, upon the calculus. By the use of scoop and forceps, the walls of the bladder were lifted off the stone, which was then, after some difficulty, shaken out of its position; and finally, though not without some expenditure of time and patience, was removed. The last stage of extraction was facilitated by the fracture of the calculus into two pieces.

The old man was a good deal exhausted at the close of the operation; but, when I saw him half an hour afterwards, he was smoking his pipe, and declared himself to be feeling tolerably well.

I have not seen him since; but I believe he recovered without a bad symptom; and I heard of him as following his usual out-door occupations some weeks after.

The stone, which was globular in form, weighed 6 oz. and 2 drs., and measured  $7\frac{1}{2} \times 8$  inches in circumference; and there was a great deal of *debris* besides. It was exhibited to the meeting.

I think this case deserving of notice on the following grounds.

*Firstly.* The great size and weight of the stone, and the advanced age of the patient. I should think that few patients have recovered from the operation of lithotomy, from whom heavier stones have been extracted. It is the largest I have ever seen removed.

*Secondly.* The operation performed was as nearly as possible the old one on the grip. No instrument could be passed along the urethra, to serve as a guide; therefore I had only to choose between a free incision forward in the middle line, or the high operation. Considering that the limits of the operation in the former direction were distinctly defined, that there was no risk of wounding any important artery (he did not lose more than a tablespoonful of blood), or indeed any vital structure, and that I have had no experience of the high operation, I decided at once to proceed in the manner described; and I believe that, from the small size of the bladder, it was the safer plan to pursue. The result has been perfectly satisfactory; and I put the case on record as an additional evidence of the power of Nature to restore health, even in the most unfavourable circumstances, after the offending cause—that which has been acting as the source of irritation—has been removed.

### READING BRANCH.

#### REPORT OF THE READING PATHOLOGICAL SOCIETY.

By FRANK WORKMAN, Esq.

[Read July 5<sup>th</sup>, 1864.]

I MIGHT well feel some diffidence, gentlemen, in undertaking the office of your orator, remembering how, last year, Mr. Marsh adorned it with all that felicity of diction, elegance of composition, and copiousness of research could afford, had I any intention of attempting to rival him. To this, however, I make no pretence; for, putting out of the question the singular literary ability he displayed in the accomplishment of his task, he possessed, in the seclusion of the dispensary, a much greater amount of quiet leisure than has fallen to my lot. And you will remember, moreover, that Lord Bacon says: "Certainly, the best works, and of greatest merit for the public, have proceeded from unmarried or childless men." I trust, therefore, that you will be satisfied on the present occasion, if, instead of imitating the brilliant commentary to which you listened last year, I confine myself simply to the task of somewhat abridging the different papers and topics which have come before us during the past session. We have been lately somewhat taken to task for the falling off of the numbers of pathological specimens and original papers from earlier days, when greater vigour prevailed; and have been told that some of our evenings have been dull, flat, and unprofitable. I fear that we must listen with contrition to the voice of admonition and reproach, and confess that more might have been achieved by a Society enrolling among its members so many men whose abilities and opportunities should have suffered no meeting to pass without some noteworthy specimen or interesting paper. I yet venture to hope that, on reviewing the labours of the past season, you will see that your meetings have not been entirely barren either of valuable papers or interesting debates on topics bearing on our profession.

Some of my predecessors have, I see, arranged their subjects under different headings, such as ner-

vous, pulmonary, or visceral; but I do not see my way to any such division of the papers at present under review, for the reason, that they seem to have taken this year a very wide range, and not to have much connexion one with another, with the exception of the class of tumours, of which we have three specimens. I shall, therefore, take them very much in the order in which I find them in the minute-book.

*Perforation of Heart.* Mr. G. MAY opened the session by exhibiting a large heart, with a rent in the left ventricle, which produced nearly sudden death. The patient—a Mr. T., in the sixty-eighth year of his age—had been a strong, tall, and generally healthy person, until seven or eight years ago, when he had a severe attack of inflammation of the right lung, which persisted for several weeks, accompanied with a copious expectoration of muco-purulent matter. He eventually recovered, with a lung damaged, but not spoiled; that is, it was generally permeable to air, and continued to perform its function. The attack, however, left a tendency to occasional expectoration in small quantity, and with a little blood; but not to affect his health or activity. Two days before his sudden death, Mr. May was requested to see him, when he found him suffering from active vomiting. This history gives the suspicion of gastric irritation from undigested food taken after a long walk. The vomiting subsided in a few hours; and the next day he was on the sofa, much better, though languid. He transacted business, joined his family as usual, and passed a tranquil night, until 6 A.M., when he awoke, and complained of great distress and pain in the sternum and throat; he fell back on his pillow, and became unconscious; soon after which, he was seen by Mr. G. May, who found him pale, perspiring, unable to swallow, pulse imperceptible, sounds of heart obscured by the mucous râles which precede death—in short, dying.

A *post mortem* examination was made twelve hours after death. The body was found to be well nourished. The liver was congested. The pericardium was filled with clotted blood. The heart was large, weighing nineteen ounces, being at least seven ounces more than natural. The cavities were dilated; the walls thin; the muscular tissue pale. The heart was covered with fat, but did not show much fatty degeneration. In the left ventricle, on the posterior surface, near the septum, was a rent about three-eighths of an inch long, communicating by a sinuous passage with the exterior of the left ventricle. There was no sign of atheromatous degeneration in the arteries or valves. A small portion of the columnæ carneæ were changed into fat.

This examination shows that it was a case of perforation, not of rupture, of the heart; for the endocardial membrane was normal, and the wall of the heart of its natural thickness. The canal of communication between the ventricle and pericardium was oblique; the inner opening not visible, and obscured by a columnæ carneæ; the outer opening small and of a rounded form, with irregular edges. The case was clearly one of interstitial abscess opening into the ventricle and pericardium; and it is not improbable that the escape of the pus into the ventricle, and thence into the circulation, was the cause of the vomiting; and that the pains in the thorax and throat, which were complained of during his last attack, and which were much aggravated before death, may be readily explained by the connexion of a branch of the recurrent nerve with the cardiac plexus. Dr. Hope has the merit of first describing this disease, and its consequence, perforation, as distinct from rupture. Dr. Quain, who has published a very able paper on Fatty Diseases of the Heart, describing with minuteness and accuracy its different



forms of disease, does not admit the views of Dr. Hope as to perforation; nor does Dr. Sieveking; but Rokitsansky has noticed and explained this important pathological condition, and fully confirms Dr. Hope.

*Ossification of the Aortic Valves.* Another interesting specimen of disease of the heart was contributed by Mr. WALFORD; but the interest in this case lies in a different condition from the former, which was remarkable from the extreme rarity of its occurrence; so much so, that eminent authorities on that very class of disease had not met with it, and in consequence doubted its existence. Mr. Walford's case, on the other hand, belongs to a class of very common occurrence; but very rarely indeed is the disease met with in such a highly developed condition.

Mrs. J., aged 52, had been actually suffering, he told us, for three or four years; but had manifested undoubted symptoms of heart-disease for a much longer time. The symptoms latterly were, the greatest possible distress on the slightest exertion; she had great difficulty in lying, being generally obliged to sit, resting her elbows on a table. Vomiting was a frequent, and at last an uncontrollable evil. On listening at the apex of the heart, a peculiarly rough rasping sound was heard, likewise audible over the base; latterly, however, this ceased. She had no dropsy; and, considering the very small quantity of nourishment taken, she lost very little flesh. A *post mortem* examination showed a heart not remarkably enlarged; but, on opening its cavities, the valves of the aorta were found ossified in the greatest possible degree, so as to admit with difficulty a small sized quill. The mitral valve was also ossified, but to a lesser extent.

It seems remarkable that, with such an impediment to the circulation, no dropsy should have existed; but I believe this is less frequently found associated with aortic than with mitral occlusion.

*Abscess of the Lung.* The next case we have presents some resemblance to Mr. May's in the early history of the patients. Fortunately, in the one I am about to read, the abscess affected an organ more tolerant of injury than the heart, and more susceptible of relief by the administration of remedies. It is a case of abscess of the lung, reported by Dr. WELLS, producing visible enlargement, not only of the side affected, but of the corresponding mamma.

Miss S., aged 64, had been an invalid for the last twenty-five years. Her illness commenced with repeated attacks of inflammation of the lungs, for which she was frequently bled. The left was the side most affected; and in it an abscess formed after one of the attacks. Seven years afterwards, when Dr. Wells first attended her, she was still suffering from constant dyspnoea, cough, spitting of blood, and attacks of an asthmatic character, rigors during the day, nocturnal sweatings, and frequent feeling of faintness. There was also a good deal of hysteria in the case. No signs of tubercular deposition could be found. There was no increased dulness on percussion. The respiratory murmur was clear and natural; and the heart beat in its normal position. The resonance on percussion was, perhaps, a little in excess of the respiratory murmur. Lately, her general health had improved, and she had gained strength. The singularity of the case lay in the visible enlargement of the left side of the chest; not only did the ribs bulge, but there was a decided enlargement of the left mamma as compared with its fellow. About three years ago, when she was severely suffering from dyspnoea, and the ribs on the left side were much bulged out, Dr. Wells gave her a strong emetic, with the view of disorging the lungs of anything capable of being dislodged. A large quantity of matter, consisting mainly of pus and mucus was vomited; and

the relief obtained was very striking, and duly appreciated by the patient, who had accordingly, since then, continued the practice of taking an emetic, at first twice, latterly only once a week. There was generally a sensible diminution of the bulging of the ribs when the vomiting had been copious.

The explanation of this case seems to be, that the cavity of the abscess became lined with false membrane, the secretion from which filled it, so that it pressed on the surrounding lung, and produced dyspnoea; while the strong contraction of the walls of the chest produced by an emetic forced this out, and again gave room to the lung to play. It seems remarkable, that so large a cavity as this must have been, should have existed in the lung without approaching, at any point, its surface so nearly as to have betrayed itself to auscultation. We must conclude that its position was central, and that it was environed by a layer of healthy lung-tissue. The enlargement of the mamma is a striking example of the sympathy existing between the lung and the ingument over it; for, as the circulation in the two organs is entirely distinct, the increased flow of blood to the mamma, causing its enlargement, cannot have been due directly to the increased flow to the cyst to supply its secretions; but only to the sympathy between the two.

*Uterine Polypus.* To Mr. Harrison, the Society is indebted for one of the most valuable papers of the session; valuable alike for the novelty and originality of the means resorted to, and the perspicuous way in which they are described; and as a model which his junior hearers may endeavour to follow in the papers which, it is to be hoped, will abound when we next meet. I should be sorry to mutilate so graphic a paper; so I give it at length as I find it.

"On Feb. 21, 1863, I was called to a lady in urgent distress from retention of urine. The catheter was used; and at this term I was not allowed further examination with the view of discovering the cause of the obstruction. The difficulty recurred April 27; and the following history was elicited. She was 35 years of age. When lifting a bedstead nine months before, she strained herself. At the time, she was unwell, and excessive pain and discharge followed. Since then her periods have been more profuse, and at rather shorter intervals; the two last were, however, more scanty. In the intervals, she has had a profuse, thin, watery discharge. Since the accident, walking has not been easy; and she has had a difficulty in relieving the bladder; twice requiring the aid of the catheter. This story shows that hemorrhage was not a prominent sign; nor anæmia a notable feature. It was the retention of urine that led to the discovery of her condition. On examination, I found a polypus filling the vagina. The ostium vagina was narrow. The perineum was thick, and so rigid that one finger could with difficulty be introduced. The portion of the polypus encircled by the os uteri was as large as my wrist, and was attached to nearly two-thirds of the cervix, close to the orifice. Through the remaining third, the finger could be readily passed into the uterus; but not so far as to reach the limit of the polypus, so as to be able to reckon the size of the intrauterine portion. Two days afterwards, Mr. May saw her. We found that the great bulk had passed up again into the uterus. The orifice of which was as widely dilated as before. Attempts to bring the polypus down were fruitless; and we were obliged to wait till it again descended. This occurred June 20th. Mr. May and Mr. G. May then saw her; and it was determined, in the first place, to dilate the external parts, as their rigidity rendered manipulation impossible. The two smallest sizes of Barnes's uterine dilators were first cautiously

introduced and dilated; the process occupying an hour. But a still larger was found requisite; so No. 3 was used under the influence of chloroform. The dilatation was thus carried to the size of a child's head. I introduced my hand into the vagina, and brought down a portion of the polypus outside the external parts. Its attachment to the cervix uteri was fairly brought into view; but still its precise extent could not be ascertained, as the polypus could not be sufficiently evolved. Three methods of dealing with it then presented themselves: 1, excision; 2, removal by *écraseur*; 3, ligature and disintegration. The last was the plan adopted. Two fingers were passed as high as possible, thrust into the polypus, and then brought downward, tearing it in their course. It was thus extensively lacerated, and some portions pulled away. There was a considerable flow of venous blood. The vagina was plugged with lint. Sunday morning. She had had a fair night; some oozing of blood. The plug was withdrawn. In the evening, she had a severe rigor, coupled with hysterical symptoms; and followed by heat, profuse perspirations, and rapid pulse. She was ordered some hot brandy and water, and a grain of opium, at bedtime. The next morning, she was comparatively comfortable; and got into the drawing-room at the end of the week. Profuse muco-purulent discharge followed, of highly offensive character; for which she used chlorinated solutions. July 4th. It was still found impossible to get a ligature round the whole of the remaining polypus. It was lacerated still further, and a large piece ligatured and cut off. No plug was used. Considerable oozing followed for several hours. She recovered from this operation without any unfavourable symptom. July 11th. The polypus was soft and lacerable. A piece as large as two fists was readily separated. No plug was used. Free oozing followed. July 18th. I pulled several small pieces away, mostly from within the os uteri. July 25th. For the fifth and last time, I pulled away all that could be seized within the os uteri. August 1st. Nothing was projecting from the os, which was reduced to its normal size. The site of the insertion of the polypus was marked by an elevation or thickening of the cervix, which, from this date to Nov. 1st—three months—has shewn no tendency to increase. Mr. May, after careful examination, advised that nothing further be attempted at present. The catamenia did not return for some weeks from the last operation; and since then, at irregular intervals and in smaller quantity. She has no mucous discharge. She is about as usual, and has regained her strength and good looks. The investing capsule of the polypus was white, thick, and very tough; so as to be with difficulty perforated by the finger. Among the soft structure were some hard nodules, two of which I show you. The greater part of the large mass removed at the third operation was soft at the time, and soon afterwards became diffuent, and could not be preserved. The operation performed must be called disintegration rather than enucleation. The intention was so to disturb the natural feeble vitality of the polypus, as to render its disintegration easy, and to cause it to shrivel and die. This end was satisfactorily answered by the means employed, as specially seen at the third operation. It must be confessed though, that it was rather a hazardous proceeding. The danger would be from hemorrhage and pyæmia; and she had a narrow escape from both. The application may be a novel one; but the principle is well known and recognised. Taking a retrospect, it proved to be the correct one. Excision would have been hazardous. The *écraseur* and ligature were inapplicable, as, from the extent of its attachment, circumvention could not have been accom-

plished. For the performance of any operation, dilatation of the vagina was essential; and this was admirably effected by Barnes's dilators, under the influence of chloroform. The necessity for such an operation as this is, no doubt, exceptional. Could a ligature have been applied to that portion of the polypus outside the os uteri, possibly the death of that inside might have followed. Probably, there is little to choose between the dangers of deligation and those of disintegration. The present condition of the patient is hopeful. The os uteri is closed; though a thickened spot can be readily felt. Till this is absorbed—as I trust it may be by the tonic contraction of the uterus on it—it will give rise to some fear that the polypus possibly may be re-produced at some future time. About the re-growth of polypi, I can find no information; and my own experience affords no parallel."

[To be continued.]

## Progress of Medical Science.

### MEDICINE.

**PARACENTESIS THORACIS.** M. Marrotte, of the Pitié Hospital in Paris, has recently placed before the profession in France a summary of the present state of knowledge in that country, and of the opinions at present there held regarding the operation of paracentesis thoracis. The subject has been repeatedly, since 1836, brought before the medical societies of Paris; it has been discussed five times in the Academy of Medicine since 1849; and in 1854 was the subject of a report by M. Marrotte. In the present day, says M. Marrotte, paracentesis thoracis is universally recognised an operation; but there are two opinions as to the circumstances under which it should be performed. Some regard it as an operation of necessity, admissible in cases only where death is imminent; while others employ it with the view of preventing grave accidents, and even of facilitating the cure of the disease. The points on which M. Marrotte specially comments, are the following:—

1. The accidents attending paracentesis thoracis as an operation.
2. The information which we possess regarding sudden death during an attack of pleurisy, the frequency of its occurrence, its causes, and the means of preventing it.

3. The indications for performing paracentesis in—*a.* Acute and chronic serous effusion; *b.* Sero-sanguinolent effusion; *c.* Purulent effusion.

1. As regards the accidents attendant on paracentesis thoracis as an operation, its partisans have affirmed that it has never in their hands produced mischief; while its opponents have accused it of always having a causal relation to the deaths following it. On this, M. Marrotte admits that, while it is true that death has generally been the result of tubercle, cancer, lobular pneumonia, pericarditis, endocarditis, hemorrhage into the pleura or bronchi, there are several instances on record, in which the operation cannot have been unconnected with the fatal result. Thus, in two cases, death occurred within twenty-four hours without evident cause; in two others, air entered the pleura; in one, the operation appeared to M. Marrotte to increase the inflammation and promote the transformation of the effused fluid into pus; and, in one related by Claude Bernard, and also in one seen by M. Marrotte, fatal peritonitis was apparently produced by puncture of the diaphragm. M. Woillez has stated that the lung has sometimes been perforated, but that the lesion has escaped notice on account of



the small size of the opening; but M. Marrotte regards this as not having occurred so frequently as is supposed. He admits, however, that, in a case observed by Aran, pneumothorax was really produced by puncture of the lung. There are also on record a case in which the pleura was detached; several where the escape of the fluid through the cannula was obstructed by false membranes; and others where the trocar was plunged into a mass of dense false membrane.

Other alleged consequences of paracentesis thoracis have been syncope, cough, and inordinate flow of blood towards the thoracic organs, producing streaks of blood in the sputa, hæmoptysis and pulmonary apoplexy, the rapid reproduction of the effused fluid, sanguineous effusion into the pleura, or the development of pneumonia or the exacerbation of the pre-existent pleurisy. M. Marrotte regards these accidents as being, when of any importance, attributable to the disease rather than to the operation.

But, while paracentesis thoracis is a more harmless operation than is supposed by many, M. Marrotte regards its innocuity rather as an excuse for than as a justification of its performance. Accidents not met with in one series of cases may occur in another series. It is not every practitioner who possesses the tact necessary to prevent the operation from being improperly or unnecessarily performed. Whenever a remedy is applied, there should be reasons for doing it; and the habitual harmlessness of an operation is not one of them.

2. Sudden death has been affirmed by observers of high repute to occur more frequently in pleurisy than in other diseases. The nature of the functional disturbance produced by the effusion is favourable to this result; but, M. Marrotte asks, is sudden death as frequent as some believe it to be? M. Marrotte does not deny that death occurs suddenly in pleurisy; but he has so rarely observed it in his twenty years' hospital experience, he has found the same facts so often adduced in support of the statement made as to its frequency, it is so easy to be misled by simple coincidences, and facts multiply so rapidly when they are sought for, that he suggests a comparative study of the question, with reference to all diseases. Some years ago, seven patients died suddenly, in his practice and that of M. Gendrin, within a few months, during convalescence from typhoid fever; and he asks whether it must be thence inferred, that sudden death frequently occurs in typhoid fever?

In 1854, syncope was regarded as almost the only cause of sudden death in pleurisy. It was considered to be favoured by the impediment offered by the effusion to the respiration and circulation; fatal syncope being determined, in these conditions, by violent movements, too rapid breathing, or mental emotion. But, while syncope is a plausible explanation of death in some cases, where there is no other apparent cause than excessive effusion with or without displacement of the heart, the syncope is often better explained by the coincidence with the pleurisy of disease of the heart, especially of the pericardium.

In other cases, death has really resulted from the presence of coagula in the heart or pulmonary artery; either formed on the spot, or carried thither as emboli. The presence of these clots cannot be attributed to the amount of effusion; for they have been met with where there has been but little. In M. Marrotte's opinion, abundant effusion predisposes to the formation of clots only through the impediment offered to the circulation and respiration. Slow asphyxia, much more insidious than rapid asphyxia, produces in the blood a relatively increased proportion of fibrine, which recent observations have shown to be favourable to the formation of clots.

M. Marrotte, agreeing with M. Goupil, observes that sudden death in pleurisy occurs at so late a period of the disease, that the fear of this event does not warrant the premature performance of paracentesis; and that it is always preceded for a sufficient length of time by premonitory symptoms.

3. M. Marrotte now proceeds to consider the indications for the operation; and first, in cases of serous effusion. In cases of pleurisy attended with excessive effusion, paracentesis is absolutely necessary when asphyxia is imminent, whatever may be the concomitant symptoms. But, when the respiration and circulation are not markedly impeded, the immediate performance of the operation is not necessary, even though the viscera be notably displaced, and the heart even pushed beyond the middle line; by delaying it too long, however, there is danger lest mental emotion or physical effort may produce rapidly fatal syncope or pulmonary congestion.

If there be slow asphyxia, or acute asphyxia, as in cases where the ascent of the effused fluid is rapid; if dyspnoea be evident to the patient, or to the physician alone; if the circulation be impeded; if the pulse be unequal, irregular, intermittent; if syncope be present or be threatened—the operation should be performed, even when there is no displacement of the heart. This precept is strongly insisted on by M. Marrotte; with one limitation. Effusion may take place rapidly, and produce dyspnoea, without compromising life; the lung is surprised for the moment, but soon becomes accustomed to the new condition in which it is placed.

The presence of effusion is almost unanimously considered to be a condition necessary for operation; but some practitioners regard the mere presence of effusion itself as a sufficient indication for paracentesis; while, with others, it must have reached a certain degree and produce certain symptoms.

*Acute Serous Effusion.* It has been recommended by some practitioners to puncture the pleura at a period varying from the seventh to the eleventh day; while others advise that the operation should be delayed until the fifteenth or even the twentieth day. But, says M. Marrotte, those who thus lay down absolute rules as to time, forget that all cases of pleurisy do not run through their stages in the same period; that their rise and progress are subject to conditions which vary in each case; that the cause of the effusion is not removed by the operation; and that of itself it cannot, beyond its physical effect, fulfil the necessary indications of treatment. This is so true, that M. Béhier, one of the advocates of early operation, after recommending the ninth or eleventh day for its performance, recognises the impossibility of precisely fixing the proper moment. M. Marrotte seeks indications in the state of the disease itself rather than in general arbitrary rules. Except in cases where death is imminent, he holds that it is impossible, at a period varying from the seventh to the eleventh day, to affirm that a serous effusion, the result of latent pleurisy, will not yield to medicinal treatment.

The presence of active inflammation is a contraindication to the operation; if, however, the symptoms be very urgent, puncture of the chest may be resorted to in order to procure temporary relief, but it will not prevent the reproduction of the fluid.

It is generally admitted that paracentesis is neither necessary nor useful in recent cases, where the effusion is moderate in quantity; but some maintain that, where the effusion, although not so great as to produce danger, is yet considerable, the operation may shorten the duration of the medicinal treatment, and prevent the formation of solid adhesions. M. Marrotte, however, cannot regard paracentesis as

presenting great advantages over ordinary treatment in these cases. It may be, that dyspnoea and febrile symptoms have ceased, as if by enchantment, after paracentesis; and evacuation of effused serum has been proposed as an antiphlogistic remedy in inflammation of the tunica vaginalis and of the eye; but, this practice must be justified by more numerous and better studied facts before it can be generally adopted. M. Marrotte acknowledges, however, that he has met with cases where early paracentesis has appeared to shorten the duration of medicinal treatment, and to prevent contraction of the chest.

In the same category with very abundant effusion, as regards the effects produced on the respiration and circulation, may be classed those cases where, in addition to effusion, some impediment to respiration, such as bronchitis or oedema, exists in the opposite lung; and cases of double pleurisy, especially when complicated with pericarditis. In such cases, M. Marrotte agrees with M. Béhier in admitting the utility, and even the necessity, of paracentesis.

M. Béhier recommends the fluid to be evacuated when the patient seems too feeble to be able to bear the long process of absorption of an effusion occupying the whole, or nearly the whole, side of the chest. But, in cases of this kind, M. Marrotte says, the probabilities of non-reproduction of the fluid must be considered; for evacuation of serous cavities tend indirectly to induce exhaustion, and to produce the very result which is sought to be avoided.

M. Marrotte confirms a statement made by M. Béhier, that the presence of pulmonary tubercle is not an absolute contraindication to paracentesis. He has performed the operation in a patient with pulmonary tubercle and ascites, who was in danger of suffocation. The fluid was partly reproduced; but, under the influence of tonics, cod-liver oil, nutritious diet, and the external use of tincture of iodine, the effusion both into the pleura and the peritoneum disappeared. The patient, however, died a year afterwards of tubercular disease of the meninges. In two or three other cases, the pleurisy and the pulmonary tubercle went on to a fatal result. In one other case only, where pulmonary tubercle co-existed with considerable effusion, M. Marrotte obtained a successful result by paracentesis. As far as can be judged, the cases of this description where paracentesis is likely to succeed, are those in which the tubercles are stationary, or undergoing very slow development; and where the pleurisy, whether symptomatic or accidental, is of the latent form. On the other hand, where the phthisis and the pleurisy are acute, puncture is not only useless, but hastens the transformation of the effused fluid into pus.

*Sero-Sanguinolent Effusion.* The presence of blood in pleural effusion is generally connected with cancer or tubercle of the pleura; hence an unfavourable prognosis must generally be pronounced, not only as to the issue of the malady, but as to the immediate result of the operation. There are, however, cases on record in which, even though the fluid has had a reddish colour, recovery, even rapid, has followed paracentesis; but in these the idea of pleural cancer or tubercle cannot, of course, be entertained. Although these favourable cases are rare, it is important to be able to recognise them. Independently of other circumstances indicating the absence of constitutional disease, they are distinguished, M. Marrotte thinks, from sanguinolent effusions symptomatic of organic lesion, by the small proportion of blood in the fluid. Sanguineous effusions connected with cancer or tubercle are generally more coloured, the presence of blood is more distinctly marked, and the fluid which escapes towards the end of the operation more or less resembles pure blood.

*Chronic Serous Effusion.* The results of paracentesis appear to have been generally unfavourable in cases of chronic effusion; and hence some reject the operation, without denying that cures are possible. Cases in which recovery has followed have been cited by M. Woillez; but our judgment is at fault, when we inquire when chronicity commences, what cases of chronic effusion are likely to receive benefit from puncture, and how they may be recognised. Chronicity has generally been defined according to the duration of the disease, rather than according to its progress and symptoms. But, M. Marrotte observes, a distinction must be drawn between those cases where the disease is still active, and often ends in the development of tubercle or pus, and those where there is serous effusion, properly so called, the simple remains of the disease. Chronic pleurisy—that is, where the pleuritic process is still active—comes much more under the domain of medicinal treatment than of paracentesis.

Of effusions which are met with as the remains of pleurisy, some have followed more or less active inflammation, accompanied by the formation of plastic products which have become organised and have produced impediment to the expansion of the lung. In these cases, puncture will probably fail, if delayed for two, three, or six months; but, if the history of the case lead to the supposition that there has been acute dropsy of the pleura, or simple latent pleurisy—in both which the plastic products are small in quantity—there is a chance that the lung will expand on the evacuation of the fluid, although the effusion is of long duration.

*Purulent Effusion.* In regard to cases of this kind, M. Woillez has noticed two circumstances which have also occurred to M. Marrotte; viz., the readiness with which pleurisy passes on to suppuration in children where it becomes chronic; and the frequency with which puncture with the trocar is followed in them by pleuro-cutaneous fistula. When empyema is present, the formation of a subcutaneous fistula, so as to allow the exit of pus, and the ultimate evacuation and contraction of the cavity without allowing the entrance of air, is much preferable to repeated punctures; although these have been followed by successful results in the hands of Legroux and Roger. M. Marrotte's recommendation has reference to children; but whether it will succeed equally well in the adult must, he observes, be determined by future experience. (*Bulletin Général de Thérap.*, 30 Août 1864.)

*CHLORATE OF POTASH IN BRONCHITIS.* Dr. Laborde, in a paper on this subject, arrives at the following conclusions. Chlorate of potash incontestably exerts a modifying influence on an inflamed bronchial mucous membrane. Simple acute catarrhal bronchitis, and even capillary bronchitis, as well as chronic catarrhal bronchitis (during its exacerbations), are capable of being influenced by the chlorate. The effects produced by the use of the medicine are the following. The expectoration is rapidly modified, becoming at first more fluid and diluted, then diminishing in quantity, and finally disappearing altogether. The morbid sounds are almost immediately diminished; the cough is allayed; and the appetite is peculiarly excited. Dr. Laborde thinks that this action of chlorate of potash tends powerfully to re-establish the patient's strength. In this respect, chlorate of potash appears likely to be useful in all cases where it is necessary to awaken and stimulate the action of the stomach. The average dose for adults is 10 grammes (about 150 grains) in twenty-four hours. It should be given in a large quantity of fluid. (*Bull. Génér. de Thérap.*, 30 Octobre, 1864.)



## Reviews and Notices.

**PRACTICAL OBSERVATIONS ON THE HYGIENE OF THE ARMY IN INDIA;** including Remarks on the Ventilation and Conservancy of Indian Prisons, with a Chapter on Prison Management. Illustrated with Woodcuts. By STEWART CLARK, M.R.C.S. Eng., Inspector-General of Prisons, North-West Provinces, India. Pp. 162. London: 1864.

THE object of this book is to show how to preserve the health of our soldiers in India, and to diminish the amount of sickness and mortality prevalent among them. The author is a gentleman who holds an important public position in India, as an inspector-general of prisons. He has, moreover, been in medical charge of troops in the same country; and has had, therefore, ample opportunities of observing the conditions under which large bodies of men are there massed together. And, with all the knowledge gained in this way, he happily possesses an amount of mechanical skill, which enables him not merely to say what ought to be done, but also to show how to do it.

The first subject which Mr. CLARK discusses is Air and Ventilation.

Speaking of ventilation, he finds that the supply of air to the soldiers in barracks is, under the ordinary system, very defective, and that to those living in tents still worse. He lays great stress on foul air as a source of disease, and points out the evils arising from overcrowding. In regard to ventilation, he describes certain atmospheric conditions prevalent in India, which affect the mode of furnishing a proper supply of pure air. These conditions are, the general want of movement in the air; and the occurrence of certain daily periodical movements.

The want of movement in the air is described as a special obstacle to ventilation by ordinary means. It is, indeed, sometimes met with in temperate climates; but in India, according to Mr. Clark, it is the rule. This atmospheric inertia, the author says, he has often proved experimentally.

"I have" (says Mr. Clark) "on several occasions conducted experiments in barracks well provided with openings for the ingress and egress of air, with the view of testing the state of ventilation; and, with the lightest substances I could procure, the external atmosphere being calm and above 80°, have failed in discovering any movement in the air inside. Indeed, during this state of the atmosphere, even smoke ascends very slowly in the open air; and the breathing is oppressed, and performed with more or less difficulty." (Pp. 22-23.)

Often, indeed, the temperature of the internal air is lower than that of the external.

The other phenomenon to which we have alluded—the diurnal atmospheric variation—is thus described.

"During the dry hot months and intervals of dry weather in the rainy season of the upper provinces of India, which comprise at least seven months of the year, after a period of eight or nine hours of dead calm, commencing about six or seven o'clock P.M. and continuing to about three or four A.M., the atmosphere begins to show signs of motion, in light puffs from the W. and N.W.; and by five or half-past five A.M., these puffs have become a steady light

breeze from the W.N.W. This gradually increases in force till after the sun has some time passed the meridian, and generally gains its maximum strength about two P.M., after which it gradually decreases till six or seven o'clock P.M. A dead calm then again succeeds; and one feels that, in addition to coolies to pull the punkah, a greater luxury still would be two or three to do the work of breathing. During this calm period, natural ventilation will not proceed, let the means be what they may; and it is during this period that foul-air poisoning proceeds too silently and surely. . . . . Between two and three o'clock A.M., a sudden change takes place in the atmosphere, more or less perceptible to the outward senses; and, although it is not always indicated by the thermometer, the sensation is one of a decided fall in temperature of the air. Persons who have passed a restless night on account of excessive heat, will generally fall asleep under this agreeable change; and, as the air begins to move about the same time, individuals so situated, if sleeping outside or with open doors, are very soon under the full influence of a draught." (Pp. 9, 10.)

This fall in temperature, Mr. Clark observes, is coincident with the minimum of atmospheric pressure and electric tension, and apparently also of vital power. He has remarked that it is at this time that the depression, and not unfrequently fatal collapse, takes place in fevers—not only, he says, in India, but also in Europe; and he suggests, in a foot-note, the necessity of watching sick children during this period. He further finds, from his experience, that it is about the time in question that the incubation of cholera and other epidemics occurs.

"I have almost invariably found, that persons suffering from cholera state, if carefully questioned, that they felt restless some time during the night, and had a copious evacuation; after which they felt better, and slept quietly till about six o'clock, when they were suddenly seized with uneasiness, and an earnest desire to go again to stool. On more closely questioning, I have found that the first disturbance occurred about, or a little before, three o'clock. I have often seen the second disturbance, or what is more generally called the first symptoms of cholera, postponed till seven or eight o'clock, and even later, when the disease was not of a very virulent type." (P. 11.)

In the second chapter of his book, Mr. Clark describes how, these conditions existing, the ventilation of barracks and of tents may be most efficiently and safely carried out. He points out the necessity of employing the "plenum" or propulsion method, and describes apparatus which he has contrived for this purpose. His descriptions are copiously illustrated with diagrams, and are, in outline, as follows.

For barracks, extending a considerable distance in line, as they generally do in India, a system of underground masonry main-flues must be constructed, with barrack-flues proceeding from them at proper intervals, and running under the floor of the barracks. From each barrack-flue proceeds a series of diffusion-pipes, which are carried up in the masonry of the walls or in wooden cases, and end in openings covered with perforated zinc plates, convex outwards. Similar pipes, opening in the same manner, are also to be carried from the barrack-flue into cases placed in the floor. The result of this arrangement is, that the air issuing from the diffusion-cases in the middle of the apartment on all sides, on meeting the currents from the openings in the walls, causes nu-

merous movements in the air, and thoroughly ventilates every corner of the barrack. The air should be drawn down through chimneys of thirty or forty feet in height, at a distance of three hundred or more feet from the barracks; and is to be propelled into the main flue at its distal extremity by fans worked by a steam-engine, bullocks, or other power, according to the size of the barracks and the number of inmates.

Means are also described for cooling the air, or warming it, according to the requirements of the case. The foul air of the barracks should be driven out through openings in the roof.

For the ventilation of tents, an apparatus formed on the same principle is described; the tubes, however, being made of canvas. In other cases, also, where ventilation is required as a temporary arrangement, canvas tubes may be used; and Mr. Clark says that some years ago he ventilated part of a house in this way.

The plan of ventilation recommended for barracks is available also for other buildings, such as prisons; and in one of these—the Agra Central Prison—it has been in operation for some time, and, Mr. Clark tells us, “is found to answer admirably.”

In the third chapter, the subject of which is Water, Mr. Clark describes the existing defects in the supply of pure water in India. The whole water supply is from the surface; and organic impurities enter from without in an alarming degree, mainly, it would appear, in consequence of the habits of the natives.

“When a native bathes, he does not carry the water to a distance from the well for the purpose; but he sits on the edge of it, and pours the water over his body, allowing it to run back into the well; and he not only washes his body in this way, but also any little clothes he may have about him, which must be saturated with perspiration and other filth. . . . Tanks are, if possible, worse; for, if the bathers do not go into them bodily, every drop of water, as it runs off them and is wrung from their wet clothes, returns into the tank. . . .

“With regard to rivers, no description can convey an idea of their filthy state, particularly in the lower parts of the country. In addition to all other kinds of filth, the dead are thrown into the rivers, instead of being burnt or interred; and thousands are disposed of in this way annually. I have myself seen upwards of fifty dead human bodies, besides numbers of carcasses of lower animals, floating in the River Hooghly, within sight at one time; and these corpses float up and down with the tide until the flesh falls off the bones, and they sink to the bottom, or lie exposed, at low water, on the muddy banks.” (Pp. 62-63.)

Speaking of the effects of impure water on health, Mr. Clark does not think that it is nearly so injurious as impure air, or, especially, as overcrowding. Cholera and other epidemics he has observed to be markedly favoured by the congregation together of large bodies of men, especially under circumstances where ventilation is defective; but, while he holds a proper provision of pure water to be of the highest importance, he does not attribute to foul water a direct share in the production of disease. We do not see that he touches on the question whether the germs of cholera, or any other disease, may be conveyed in water, even apparently pure; but he says that the water of the Hooghly (dirty as it has been

seen to be) is supplied to ships in an imperfectly filtered condition or not filtered at all; and that there “is no positive proof that it is injurious to health to the extent some authorities would wish us to believe.” At the same time, he fully admits that

“Bad water, like other articles of diet of an inferior or bad quality, if continued for any length of time, must lower the tone of the general health, and in this way aid considerably in the propagation of diseases such as bowel-complaints, and, it may be, under certain conditions, cholera and dysentery; and, therefore, as already stated, every possible care should be taken to insure that the water supplied for drinking and culinary purposes is of the best quality.” (P. 86.)

To obtain a supply of pure water, the following conditions are insisted on by Mr. Clark.

“In the first place, the supply should be plentiful, and drawn from near the bottom of deep wells; and in the second, all the water used for drinking and culinary purposes, whether in cantonments or on the march, should be properly filtered.”

He describes the means of effecting these objects, by means of properly applied pumps and filters; and recommends that water-pipes should be laid in the barracks, and that drinking-fountains should also be provided for the use of the men. He believes—and probably correctly—that a proper supply of pure water would go far to remove the inducement to indulge in ardent spirits.

The fourth chapter is on Food. Mr. Clark agrees with Sir Ranald Martin in considering quantity of very great importance. Observing that “the most abstemious are the most healthy men in India”, he recommends a reduction in the quantity of meat allowed to the soldiers. One meal of meat a day he holds to be quite sufficient in a tropical climate; and the supply of fruits and other vegetable food should be increased, so as not to reduce the total amount of ration, but to regulate its constituents according to the season and other circumstances.

After some judicious remarks on the cultivation of vegetables, and on parasitic diseases in meat, the author gives a graphic description of ordinary cooking arrangements in India, which certainly appear to be most defective and dirty.

“The preparation of the food is usually conducted on a dirty mat spread on the floor of the cook-house, the luxury of a clean dresser or table for the purpose being rare. . . . The cook-rooms, instead of being well lighted, and properly defended from flies, external dust and dirt, are dirty, smoky places, open to every filth that may be blown their way; generally without proper furniture and tables for dressing the food on; and with no better arrangement for the supply of water than what is afforded by the ‘Bhestie’s mussak’ and a few open earthen jars, seldom or never cleaned out, and generally used until they fall to pieces, which fortunately is very often.”

Having thus described the state of barrack cook-rooms, Mr. Clark points out what their proper construction should be. Even ordinary kitchens, although apparently clean when visited, are not unfrequently the “dirtiest places on the whole premises, and a fruitful source of disease in many instances.”

In the fifth chapter, Conservancy is treated of; that is to say, the disposal of night-soil. Mr. Clark is altogether in favour of the use of antiseptics—especially carbolic acid; and he describes various forms of latrines and urinals, in which excreta may



become mixed with the disinfectant, and ultimately rendered available for application as manure. He refers to the evidence of Dr. Angus Smith, regarding the effects of carbolic acid; and speaks highly, from personal observation, of the efficacy of the disinfecting powder and liquid of Mr. McDougall. The chapter is concluded with some remarks on the conservancy of prisons and on ablation.

In the sixth chapter, Drainage is briefly noticed.

In the seventh chapter, entitled Supervision, Mr. Clark insists strongly on the importance of employing proper means for carrying out a system of sanitation. He would have supervisors appointed, who should thoroughly understand sanitary science, and have proper means at their disposal for carrying out such measures as they may deem necessary. He very correctly points out, that the employment of the European soldiers in the performance of much of the work described in previous pages would be highly beneficial to them.

"Wherever there are European soldiers, it would not only be an advantage to the state, but a positive boon to the men themselves, independently of the remuneration which they might receive to give them healthful employment." (P. 124.)

In the eighth chapter, the author gives his opinion on the Construction of Barracks. He insists on the necessity of a sufficient superficial area—at least seventy-two square feet—being allotted to each inmate; without this "no amount of air piled above a person's head will render his position either comfortable or healthy." The location of troops or other large bodies of men in small parties in separate apartments, he strongly approves.

The ninth chapter, headed Financial Results, contains an elaborate estimate of the cost of the various apparatus and machinery described in previous pages, and of the saving to the state to be gained by their adoption.

In the tenth chapter, are described Various Apparatus; viz., a Thermanitidote, or portable ventilating apparatus; a Portable Blower, made from a common cask to which a fan is fitted; a Portable Filter, consisting of a common bucket or other convenient vessel properly fitted with sand, charcoal, etc.; an Ambulance designed by the author; and an apparatus for testing the purity of air by means of permanganate of potash.

The eleventh chapter is on Prisons and Prison Discipline. In it Mr. Clark points how, in ordinary cases, the prisoner is placed at a great disadvantage in regard to ventilation, as compared with the soldier. The author considers that the prison-workshops should be in separate inclosures, and the system of discipline so arranged as to admit of the daily removal of the prisoners to some little distance from their sleeping quarters during the hours allotted to labour. He gives a ground plan of a prison arranged on the radiating principle, which would, he believes, "allow the introduction of an improved system of prison-discipline, which would further improve the sanitary condition of the prisoners." The work is concluded with some remarks on prison-discipline, in which the author expresses his approbation of the Irish system.

We would commend this book to the study of all who have to deal with the sanitary arrangements of large bodies of men, in India especially. The author

has plainly shown what is required; and has carefully described the means by which, in his opinion, the necessary improvements may be effected. We trust that his suggestions will meet with due consideration, and be productive of benefit to our soldiers in India.

ON DIPHTHERIA AND DIPHTHERITIC DISEASES.  
By J. W. WALKER, M.B.Lond. Pp. 88. London: 1864.

THE chief contents of this little volume have already been under the notice of the readers of this JOURNAL. Dr. WALKER has re-arranged the materials of his work; and now presents it to the profession in the present form.

Dr. Walker treats the question of diphtheria like a practical man; he writes clearly; and his matter is well arranged. Whoever peruses his pages will, we are satisfied, agree with us, that he has produced, in a condensed form, a capital summary of the main facts relating to diphtheria. He has especially pointed out the real value which is to be attached, from a practical point of view, to the local—the throat—lesion.

## British Medical Journal.

SATURDAY, NOVEMBER 19TH, 1864.

### A SPECIAL HOSPITAL.

A SO-CALLED hospital has lately sprung up in this metropolis, and illustrates, in a remarkable manner, many of the evils—we mean injuries to the profession—which we have so often pointed out as necessarily connected with institutions of this kind. We refer to a house in Berners Street, which is designated "St. Peter's\* Hospital for the Cure of Stone in the Bladder and Urinary Diseases." Now, it may be properly asked, Why is this institution formed? Is it that there are no hospitals in London in which stone can be properly treated? Is it that there are no institutions in London where urinary diseases can be properly attended to? We suppose the answer from its promoters would be, that there certainly are medical institutions where such diseases can be treated; but that in general hospitals and dispensaries they can not be so well attended to as in a hospital specially devoted to their cure. And it may be observed, that this particular institution is not got up (as ordinary medical charities are) to supply any particular district with medical advice. It is raised, in a sort of national way, as a hospital to supplement the general failures and defects of our large established institutions, in the treatment of stone and urinary diseases. At least, if this be not the pretence of its origin, why was it promoted?

Now, it must not be understood that, in singling

\* Was this particular saint selected as a joke, on account of the derivation of his name?

out this special institution, we are condemning it in any especial manner. We suppose the very same remarks made in reference to it will fit equally well many other special medical institutions. Indeed, if this last of the specialties had stuck solely to the text of lithotomy and lithotripsy, probably something might have been said in favour of it, such as has been said in favour of other certain special institutions. But it has not done so; and, therefore, we take the liberty of inquiring into the uses and purport of institutions of this kind. And we shall show, from the illustration, what we believe to be the evils which the public as well as the profession suffer through the raising up of such places; removing the veil from the face of the mock philanthropy which pretends to preside over their birth and nurture.

The pretence, as we understand it, is, that these charities are formed to relieve the woes and sufferings of humanity—to answer the cries of humanity; but the real truth seems, to indifferent observers, to be that they tend much rather to promote the interests of those who get them up, than of the sick sufferers who resort to them. We are justified in saying this, and the conscience of the profession is with us in saying it—the whole profession, indeed, has already exclaimed against such a particular special hospital as this, as being one not needed and superfluous; so far, at least, as the interests of the suffering are concerned.

The moral we would here draw from the tale is this: To show the injury which is done to the profession generally, and to the public at large, by such injudicious giving away of medical services and disposal of charitable funds.

This hospital is for “stone and urinary diseases”. “Stone” cure by cutting or crushing was, we believe, its original pretence; and, on the ground of its being a “stone” cure, the interests of the establishment are still mainly worked. But cutting for stone and crushing stones are necessarily very limited occupations; and, therefore, it is, we suppose, that “urinary diseases” are included in the benefits of the place.

Urinary diseases! well, all the medical world knows what they mean in the eyes of an enlightened public. All the medical world knows that, with that programme, a full house will be secured—a first-rate audience never wanting. And when we add to this, that other happy hit, “no recommendations required”, we may be very sure that the so-called Stone Hospital will not fall through for want of applicants for its benefits. A special hospital for stone and urinary diseases, no questions asked, and all applicants admitted on the mere strength of application—these assuredly are inducements which bid fair, *a priori*, to fulfil the most sanguine expectations of the managers of the scheme. It is impossible not to confess that the idea, in one sense—a personal one, is a very happy one. A hospital for the cure of stone is

the proposed basis of the undertaking. The treatment of urinary diseases (which comprise diseases, in the opinion of the public, incidental, at some period or other of life, to every living being) is the engagement entered into by the promoters of the hospital.

Let us see how such a scheme will work. The public have an unquestionable faith in specific diseases-curing hospitals. To this hospital, we have no doubt, that “urinary diseases” sufferers will resort from all parts of London, and probably, in due time, from many parts of England, Scotland, and Ireland—of course, under the distinct idea, that nowhere else can they obtain so good a cure for their “urinary disease”—whatever that may mean. Who profits in this business? Who is injured in it? Are its promises—or what we know the public consider to be its promises—true; or are they delusive?

The answer to the first question is simple enough. History and common sense tell us, that the medical promoters of such like schemes, as a rule, profit greatly by them; that thereby they attain fame and large practice. This much is certain. But is it equally certain that the objects of such supposed charities obtain the benefits promised them? Regarding the question from a narrow point of view, we may say, that no doubt individuals may receive benefit, as far as the treatment of their diseases is concerned; but, looking at it from a broad view, we may also say, that *soi-disant* charities of the kind supposed do infinite mischief to the public as well as to the profession. In the first place, they induce the really necessitous, at great pains and often cost, to travel long distances to obtain that very relief for their “urinary diseases”, which they might have obtained equally well, and probably much better, at the hospitals standing close to their own dwellings. The programmes of such charities delude the public into the idea that they possess some great and specific panacea for such ailments, which other practitioners of the medical art and other medical charities do not possess. Then, again, by throwing open their doors to all comers—“no applicants refused”—they encourage unfit and improper objects to apply for relief, to the great injury of the profession at large, and to the demoralisation of the individuals so applying. The injury thereby done to the profession at large is wholesale. Patients ready, able, and willing to pay for advice, naturally and reasonably seize upon the offer of having their cure effected gratis; and what is the consequence? The general practitioner is thereby robbed of his patients. The patients who are his legitimate clients are gratuitously treated by these special medical philanthropists—by the great conjurers at these institutions—wizards of the healing art—who, in the meantime, get a world-wide fame of one sort or other; but still a fame which brings them much, and of that gain so much desired by men of our modern civilisation. And this gain,



as we have said, is obtained at the cost of the general practitioner; a fact which is a matter of very secondary importance to them, or to which their eyes are not directed.

And what are we to say as to the promises held out to Plebs suffering from "urinary diseases"? Are they delusive, or a solid fact? Are there, or are there not, hospitals and dispensaries in any quarter and demi-semi-quarter of London, where Plebs may get as effective a cure for his diseases, as he can at any one special "urinary diseases" institution?

Is Plebs, who has been led to believe, above all, in this one particular institute, labouring under a delusion; or will he, indeed, get some masterly stragem in cure which he could nowhere else obtain? Plebs thinks so, of course; but the profession at large will, we apprehend, rule that he will get nothing of the kind, and, consequently, that he is, in fact, either labouring under self-delusion, or that he has been deluded.

We need hardly say, that special institutions of this kind always bear on their frontispiece the shade of suspicion; for the reason that they have been raised into being, not from any urgent cries of suffering humanity, nor from any public call of benevolence. They are the manufacture of medical men; and without any great stretch of the personal offence of imputation, we think we may safely affirm that, as a rule, there is very little of any real force of charity or benevolence operating in the minds of their promoters.

It would be well if the benevolent who are induced to patronise schemes of this kind, could be brought to ponder over these things, or could be made acquainted with them. We apprehend that if they did, they would quickly satisfy themselves that their alms could be infinitely better bestowed—would go much further, *i.e.*, would do greatly more good to the sick—if they were given towards the support of the medical charities already in existence. The establishment of a small house for the cure of stone and urinary diseases under the very shadow of the Middlesex Hospital, is it not, in a charitable sense, playing the farce of charity?

#### THE PUZZLING CASE.

THE Medical School Committee of St. George's Hospital have investigated the history of the case of George King, so far as the hospital was concerned with it; and have come to the conclusion, "that every proper care was taken in the treatment."

"It appears that George King was admitted into St. George's Hospital on Sept. 30th, about 5 p.m., in a state of unconsciousness. He was immediately examined by the house-surgeon, and no trace of any external injury could be discovered. Mr. Freeman, judging the symptoms to be those of intoxication, sent for the assistant-apothecary. Mr. Jones also examined the man for external injury, and found

none; but from the odour of the breath and the matter vomited, which smelt strongly of spirits, had no doubt that King was under the influence of liquor. George King remained in the hospital for two hours and a quarter. About an hour from his admission, and after vomiting, George King began to recover consciousness; and, at the expiration of the two hours and a quarter, was so far recovered that permission was given to the policeman to remove the man from the hospital, provided that his residence could be ascertained. Contrary to the expressed condition of this permission, George King was removed to the station by a policeman, without the knowledge of either Mr. Jones or Mr. Freeman. The man walked out of the hospital; and it has been given in evidence before the coroner, that he walked to the police-station in King Street, Westminster."

OUR readers will regret to hear that Dr. Chambers has resigned his office of Physician to St. Mary's Hospital. Yielding to the advice of his medical attendants, he has resolved to retire entirely, for some months, from the active duties of his profession. We trust that we may, ere long, be enabled to announce that he has again returned to London practice, and to the School at St. Mary's, where he has long laboured so honestly and so zealously. Dr. Chambers is, we are glad to add, in as good health as could be expected, after having undergone so serious an operation. Indeed, that he is so, may be gathered from the fact, that he now performs his duties of Examiner at Oxford. It is his intention, we believe, to pass some months in Italy. Dr. Chambers retains his Lectureship at St. Mary's Hospital Medical School; and has been recommended by the Weekly Board to be appointed Consulting Physician to the hospital.

THE lawyers of the defendant in the case of *Gedney v. Smith*, explain as follows the absence of "Dr. Goss" from the witness-box.

"Dr. Goss", although subpoenaed, did not think fit to appear in court; and, as we had reason to know that he could not have given evidence without exposing himself to the risk of some such charge as 'conspiring to defraud', it was no marvel that he kept away. If the confinement in Park Street had been a real and honest affair, the plaintiff's advocates could, and doubtless would, have called 'Dr. Goss' to prove the simple fact of the delivery; but that they evidently dare not do, but commenced their medical proof by calling Dr. Farre, who only came on the scene four days after the alleged confinement; and, being told by the husband that the event had happened so long before, and finding the lady going on well, his attention was probably not directed to any such minute examination of the case, as, under other circumstances, would have resulted in the discovery that 'a comedy was being played under his eyes.' The landlady proved that on the very day of Dr. Farre's first visit, Mrs. Gedney got up; for she saw her on the sofa."

In reference to the obtaining of the supposititious child from the York Road Lying-in Hospital, they state:

"The young woman's mother came to the hospital, and agreed to the child being taken away as stated.

There seemed no reason for the hospital authorities to interdict or interfere in it; and, in justice to them, we have pleasure in testifying that they have afforded us the fullest opportunities of examining the hospital records, and obtaining information tending to throw light on the affair in question, and for which we beg thus publicly to thank them. We ascertained at that and other hospitals that the occurrence of a child being taken away from them for adoption is very rare; but, doubtless, our great metropolis affords facility enough for procuring a child when one happens to be required."

Doubtless, an occurrence of this kind must be very rare in a London hospital. We should hope it was an unique one. We doubt not for a moment, that the hospital authorities, in the present instance, thought they were doing an act of kindness to the child; but, as the event has shown, they have been unconsciously made a party assisting in the perpetration of a fraud of a very serious character. There is nothing to prevent mothers, in their own dwellings, getting rid of their offspring in the way here shown; but we are sure that the moral sense of the profession is with us when we say, that no proceeding of the kind ought to be permitted in any of our medical or other charities, except under some kind of distinct legal sanction. The authorities ought to know who it is that takes the child away, where it is going to, and the reasons for its being taken; and, more than this, it should take means to prove the identity of the child. As we have already said, nothing more is needed to show the necessity of such precautions being taken, than the history of the case of Gedney v. Smith.

At the annual meeting of the Society for the Relief of Widows and Orphans of Medical Men, held on Oct. 26th, Mr. Martin Ware was elected President, in the room of the late Mr. T. A. Stone. Mr. Ware is the oldest living member of the Society; and is the son of one of its most strenuous and indefatigable supporters, Mr. James Ware, its second President. He has been for many years the senior Vice-President of the Society. We would remind our associates within the county of Middlesex and the limits of the London postal district, that, as stated in an advertisement which appears in this day's JOURNAL, a quarterly court of directors will be held on Dec. 7th, at which candidates for admission into this useful society can be proposed. Applications for forms of proposal, which should be sent in a few days before the meeting, may be made to the Secretary, Dr. Merriman, at the office of the Society, 53, Berners Street.

M. DESMARRES, the younger, is led by the discussion on iridectomy at the Society of Surgery to make a few clinical remarks on the subject.

"Ten years of experience of glaucoma and iridectomy have led him infallibly to the following conclusions:—1. There are two kinds of glaucoma, acute and chronic. 2. Their symptomatology varies much.

The symptoms which characterise *acute glaucoma*, and which invariably exist at one period or other of the disease, are these: hardness of the eye; subconjunctival venous congestion; insensibility of the cornea; removal of its epithelium; diminution of the anterior chamber; dilatation and immobility of pupil; discoloration of iris; pulsation of the central artery; iridescent circles; periorbital neuralgia; obscuration of vision. In *chronic glaucoma*, on the contrary, only a few of the preceding symptoms are observed, and generally in a not well marked form. The progress of *acute glaucoma* is very rapid; in seven or ten days, sight may be entirely lost. *Chronic glaucoma*, on the other hand, may take months and even years for its development; is often unattended with pain, or any other symptoms than progressive disturbance of vision. Excavation of the optic nerve exists from the first, and sight is gradually lost. 4. Iridectomy gives marvellous results in *acute glaucoma*; but is in most cases useless in *chronic glaucoma*. M. Desmarres then inquires into the pathological conditions of these affections. According to him, there is an anterior and a posterior glaucoma, just as there is an anterior and a posterior circulation, of the eye. The anterior affection is acute, the posterior chronic glaucoma; but both sorts, by extension of the affection which they represent, may gradually pass one into the other. Acute glaucoma attacks the anterior, the most sensitive parts of the eye; chronic glaucoma attacks the vascular system of the posterior hemisphere of the eye, pressing and cupping the optic nerve. Iridectomy can only act upon the choroid vessels which are in direct communication with the vessels of the iris. Daily experience shows that the operation succeeds in acute glaucoma, especially during the first fifteen days—i. e., when the disease is localised in the anterior hemisphere; but that, when the glaucoma has passed this limit, and has become chronic, iridectomy is of very little use. Perhaps, in this latter stage, it would be more rational to perform Mr. Hancock's operation—iridectomy, as M. Richet calls it—carrying the incision, or the sclerotic paracentesis, as far backwards as possible, for the better depletion of the choroid vessels."

M. VELPEAU, a few days ago, made the following remarks about puncture of the bladder.

"Puncture of the bladder is a rare operation, which surgeons, even in large practice, do not practise more than once or twice in their lives. Puncture by the rectum is bad, because, in performing, a fold of peritoneum is traversed. The hypogastric puncture is, also, always to be dreaded; there are many tissues punctured; and, as the bladder is emptied, the cannula is liable to fall or slip out of it, and so allow the escape of urine into the peritoneum. Even with an elastic catheter, there is no security. M. Roux was much blamed for practising forcible catheterism; but in much too general a way. Retention of urine is due either to stricture of the urethra, or to prostatic disease. Forced catheterism is bad in the former case; but not in the second. If the prostate be torn, no great inconvenience results. The prostate is formed of a tissue which does not readily admit of infiltration. Mr. Ségalas remarked that, of three surgeons who reported on the case, two of them had only performed puncture of the bladder once, and the reporter himself never. M. Velpeau did not wish it to be understood that puncture was never necessary. Success in catheterism depends much on the skill of the operator. The urethra has been compared to an undistended wet linen tube. One surgeon, ten surgeons, may have failed; then comes the eleventh, who succeeds."



M. Diday told the Lyons Medical Congress something worth noting; viz., how to cure mentagra at a single sitting.

First of all, remove the crusts with linseed poultice; then cut off the hairs as close as may be; next immerse the part for half an hour in lukewarm water; lastly, apply to the parts diseased, during four hours, a solution containing a thousandth part of bichloride of mercury; then add drop by drop to this solution a much stronger one—1 part in 30—and keep on adding until redness and pain are occasioned, after which add no more. It is essential that during the first hour the patient feels no pain. It is a pity M. Diday does not publish his proofs—we mean cases, as demonstrative of his statement of rapid cure of what is generally regarded as a somewhat rebellious disease.

#### THE MANCHESTER AND SALFORD SANITARY ASSOCIATION.

THE last annual report of the Manchester and Salford Sanitary Association contains some papers likely to prove interesting to the medical profession. The first to which we desire to direct attention, is one by Dr. Angus Smith, on the Adulteration of Food. It is based on the analyses of Messrs. Crace Calvert, O'Niell, Roscoe, Schunck, and Angus Smith, tabulated and arranged by Mr. O'Niell. These distinguished chemists devoted much valuable time to the analysing of those articles of food on which the poorer portion of the population more especially depend for their subsistence. The specimens were purchased by an officer of the Association, in retail shops situated in the less wealthy districts of the town, and chiefly frequented by the labouring classes. The result of seventy-five analyses goes to prove that though dangerous adulteration is happily practised but rarely, the fraudulent admixture of foreign substances, harmless indeed in themselves, is of decidedly frequent occurrence. Another valuable paper entitled *Fluctuations in the Death-rate of Towns*, the joint production of Messrs. Arthur Ransome and William Royston, was published by the Association in the course of the year.

The following are the conclusions at which they arrive:—

1. That the migration of persons from healthy districts into large towns, alters materially the proportions of the inhabitants at the several periods of life, and causes an important variation in the death-rate.

2. That this variation, not being due to causes connected with disease, prevents any determination of the health of towns by a mere comparison of their respective death-rates.

3. That to obtain a typical representation of the mortality occurring amongst the fixed population of large towns, the deaths at those ages most affected by the fluctuation of the population must be separated from those which take place at an earlier period of life.

4. That the proportion which the number of births bears to the number of deaths, happening in any community, is no test of the healthiness of that place.

5. That the average age at death, in any town, is not a fair test of its salubrity.

6. That preventable deaths are not alone caused by defective sanitary conditions, but frequently, also, by want of knowledge and want of care on the part of the inhabitants.

7. That no conclusion, therefore, can be drawn respecting the sanitary condition of a town from a mere inspection of its rate of mortality.

8. That the instruction of the public, and especially of the poor in matters relating to health, is as important as the prosecution of sanitary reform by legislative and mechanical means.

In one of Dr. Morgan's quarterly reports on the health of Manchester, we find the following remarks on the epidemic of scarlet-fever, which in the year 1863 proved so prevalent in various parts of the kingdom. The statistics of the last quarter (the December quarter) tend still further to confirm a remark made in our last report, that the advance of scarlet-fever is in all cases steady and progressive, not sudden or rapid. It does not burst out in different quarters of the town at one and the same time, but appears to travel from district to district, and steadily gathers strength. Thus, the first week in which in the course of the present epidemic it appeared to any unusual extent, was that terminating September 13th, 1862; in that return were recorded 11 new cases, 6 of them in a single district; in the first quarter of the following year the number amounted to 157. The disease at that time was principally confined to the township of Manchester; in Salford and Hulme the seizures were only 14 and 6. In the next quarter 281 patients applied for relief; in the third 602; and, in the fourth and last, 867. It is important, moreover, to bear in mind that these figures refer only to those persons who presented themselves at our public charitable institutions, and probably did not constitute more than about one-seventh of the cases which actually occurred. On turning to particular districts the same law of gradual diffusion becomes still more strikingly apparent. We observe, in fact, at first but a few scattered cases which, as months and quarters roll on, become more and more widely disseminated.

There is another question connected with scarlet-fever on which the statistics of the Sanitary Association help to throw some light,—it bears on the opinion held by many zealous though probably too enthusiastic sanitary reformers, which would, if established, go to prove that both scarlet fever, and indeed all the other zymotic diseases, are primarily and essentially generated by the exhalations emitted from decomposing animal and vegetable matter. Now, though it may be and probably is true that defective drainage tends, in some degree, to intensify many of these disorders, we have no grounds for believing that it ever proved the sole exciting cause of any single attack, either of scarlet-fever or small-pox. Indeed there are many districts in Manchester second to none either as regards the attention bestowed on the drainage or the purity of the water supply; and yet, even in such apparently favoured localities, the disorder has taken on a highly malignant form, and the proportion of deaths to seizures proved unusually high.

A further interesting fact connected with scarlet-fever is the character of greater malignancy it appears to assume in certain localities than in others, to all appearance at least, similarly situated, and it is here that we find the condition of the Manchester Poor-Law districts generally favourable.

Another point of interest in the present visitation of scarlet-fever concerns the progressively increasing intensity, the proportion of deaths to seizures having steadily risen. Thus, in the second quarter of last year, only 1 case in every 9·3 proved fatal; in the third, 1 in 8·3; and, in the fourth, 1 in 6·3. This increase is very considerable, amounting in fact to nearly three deaths instead of two to every twenty seizures.

## Association Intelligence.

### MEDICAL PROVIDENT FUND.

The following contributions have been made to the Guarantee Fund.

|  | £.  | s. | d. |
|--|-----|----|----|
| Amount already announced               | 570 | 18 | 0  |
| James Paget, Esq., F.R.S. (London)     | 10  | 10 | 0  |
| William Bowman, Esq., F.R.S. (London)  | 10  | 10 | 0  |
| Richard Quain, Esq., F.R.S. (London)   | 10  | 10 | 0  |
| Dr. C. J. B. Williams, F.R.S. (London) | 21  | 0  | 0  |
| Sir James Clark, Bart., M.D.           | 10  | 10 | 0  |
| Dr. C. Holman, Registrar               | 5   | 5  | 0  |
| Joseph Ward, Esq. (Epsom)              | 5   | 0  | 0  |
| Joseph Blackstone, Esq. (London)       | 10  | 10 | 0  |

Further contributions will be announced.

Gentlemen desirous of contributing to the Guarantee Fund, will oblige by forwarding their names and the amount of their donations, either to the Chairman (Dr. Richardson, 12, Hinde Street, Manchester Square, W.); or to the Secretary (Dr. Henry, 15, George Street, Portman Square, W.)

B. W. RICHARDSON, M.D.  
ALEXANDER HENRY, M.D.

London, 16th November, 1864.

### BRANCH MEETINGS TO BE HELD.

| NAME OF BRANCH.                  | PLACE OF MEETING.          | DATE.                          |
|----------------------------------|----------------------------|--------------------------------|
| SHROPSHIRE ETHICAL.<br>[Annual.] | Lion Hotel,<br>Shrewsbury. | Mon., Nov. 28,<br>2.30 P.M.    |
| BATH AND BRISTOL.<br>[Ordinary.] | York House,<br>Bath.       | Thursday,<br>Dec. 1, 7.15 P.M. |

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH: MONTHLY MEETING.

A MEETING of this Branch was held on November 10th, 1864; JAMES RUSSELL, M.D., President-elect, in the Chair. Sixteen members were present.

*Resignation of the Secretary.* A letter from Mr. Oliver Pemberton, announcing his resignation of the office of Secretary, having been read, a very cordial vote of thanks to him, for the able manner in which he had discharged the duties of that office for nearly ten years, was unanimously passed.

Dr. W. F. Wade was elected Secretary.

*The Medical Provident Fund.* It was unanimously resolved, that it was undesirable that the benefits of the Provident Fund should be limited by age.

*Communications.* 1. A paper was read on the Surgical Bearings of the Cellular Pathology. By Furneaux Jordan, Esq.

2. Mr. Solomon exhibited diagrams illustrative of the operation devised by him for the relief of extreme External Strabismus, and explained the steps of his operation.

**AFRICAN NEWS.** At Brass, on October 5th, the *Investigator* was daily expected from the Niger, with Dr. Baikie, the African traveller, who has been exploring this river for the last seven years. At Accra, on October 12th, small-pox was raging when the mail left. Great dissatisfaction was felt by the inhabitants at the conduct of the Cape Coast Government in neglecting to appoint a colonial surgeon, notwithstanding that this officer's salary is specially provided for out of the Customs' dues. A meeting had been held at Addo's Hotel, and a subscription got up for Staff Assistant-Surgeon Gun, who had consented to carry out the wishes of the commandant for compulsory vaccination. The amount subscribed exceeded £60.

## Reports of Societies.

### HARVEIAN SOCIETY OF LONDON.

THURSDAY, OCTOBER 20TH, 1864.

WM. ADAMS, Esq., President, in the Chair.

*Cases of Abnormal Pulse.* Dr. DRYSDALE mentioned two cases of habitually abnormal pulse, lately observed by him at the Farringdon Dispensary. The first case was that of a man aged 50, who had formerly been in hot climates, and was now a light porter. His pulse beat habitually thirty-six times in a minute. No abnormal sounds were heard either in the heart or great vessels. The man complained of debility and cold. The second case he had seen that day. A woman, a book-finder by trade, had for more than a year been patient at the dispensary. Her pulse during that time had always been nearly 160 in a minute. She was extremely nervous and melancholy. No abnormal sound was heard at the heart. There was no cough. She complained much of headache occasionally. He had examined the pulse very frequently at the dispensary, and never found it lower than 140. In reply to a question by Dr. Graily Hewitt, Dr. Drysdale said the patient was married, without children; and that she had leucorrhœa. The man had been a great smoker.

Mr. TIMES mentioned that a patient of his had had the pulse reduced to 20 beats in a minute, by five minims of colchicum wine given three times a day.

The PRESIDENT said that a hospital surgeon in London had habitually a pulse under 30. He had had fever in the Crimea. He complained of cold, but could not take stimulants.

Mr. SEDGWICK had had a patient whose pulse during an attack of sciatica had gone down to 43: normally, being 78. Napoleon I had a pulse of 45.

Mr. J. Z. LAURENCE observed, that such abnormal pulsations were doubtless examples of idiosyncrasies, just as pulsations in the retinal veins are met with in some.

Mr. CURGENVEN observed, that sometimes great frequency of pulse occurred when there was pressure on the pneumogastric nerve. Quick pulse was frequently found in females; e.g., two sisters, patients of his, had constantly a pulse of 120 and 118. It was of consequence, on first seeing a patient, to be aware of such facts.

Dr. GRAILY HEWITT had a young lady patient, whose pulse was constantly 120.

THE RESTORATION OF MOTION IN CASES OF PARTIAL ANCHYLOSIS, OR STIFF JOINTS, BY FORCEBLE EXTENSION UNDER CHLOROFORM.  
BY WM. ADAMS, ESQ.

The author commenced by adverting to the history of the operation before and since the introduction of chloroform, and alluded especially to Langenbeck, the late Bonnet of Lyons, P. Frank, Skey, Paget, Erichsen, etc., who, amongst English hospital surgeons, had more recently adopted the operation.

Mr. ADAMS's first cases were treated, in conjunction with the late Mr. Lonsdale, at the Orthopædic Hospital, in 1854 and 1855, and were described in the author's work *On Subcutaneous Surgery*, published in 1857. Since that time he had adopted the practice in a large number of cases; and one point to which he had especially directed attention had been to determine the particular class of cases to which the treatment is applicable, and those in which it is either attended with danger, or would probably fail



in its object of restoring motion. These points were, therefore, chiefly discussed in the present paper.

The author then made some observations on the constitutional conditions upon which diseases of the joints depended, or with which they were generally associated; and, with reference to the treatment by forcible extension, he arranged all cases of ankylosis or stiff joint in three classes—viz., 1, the strumous; 2, the rheumatic; and 3, the traumatic.

With regard to the first class—the strumous—the result of the author's experience had been to prove that they are decidedly the most unfavourable for the treatment by forcible extension; and he had determined never to repeat the operation in any case belonging to this class, unless it should be of a very exceptional character, and present unusually favourable conditions. Where the cartilages are destroyed, as they generally are, to a greater or less extent, in the strumous diseases, a stiff joint is the best possible result. Forcible extension may produce serious inflammation; and, even if some motion be gained at the operation, it will be subsequently lost, and stiffening return. Several cases, in illustration of these points, were given by the author; and a few favourable and exceptional cases were also mentioned.

With respect to the second class—the rheumatic—the results of the author's experience had been just as favourable as they had been unfavourable in the strumous class. In a large proportion of cases of stiff joint, or ankylosis, occurring in young adults after rheumatic fever, or as the result of gonorrhœal rheumatism, free and useful motion may be restored by forcible rupture of the adhesions and thickened ligamentous tissue. The author believed that the articular cartilage always remained healthy in these rheumatic cases; and that the great pathological peculiarity of the rheumatic form of inflammation, in whatever organ or tissue it occurs, is a remarkable indisposition to suppuration or the ulcerative process. The author had never seen suppuration occur as the result of rheumatic inflammation; and when it does occur, as a rare event, the case is probably one of a mixed character, and not purely rheumatic. The tendency of rheumatic inflammation is to the adhesive form of inflammation; so that it produces adhesions and thickening of the ligamentous tissues of the joint; but neither suppuration nor ulceration occurs.

In the third class of cases—viz., the traumatic—the results of forcible extension are also generally very favourable, although more uncertain, and, on the whole, not quite equal to the results obtained in the rheumatic class.

Several cases illustrating the successful results of forcible extension, permanently restoring useful motion in the rheumatic and traumatic classes, were then detailed by the author.

Dr. DICK observed, that Sartorius was the first surgeon to break down joints. In 1836, a surgeon in Paris employed this process; then Bonnet brought it into vogue. In former times, the cases were not so well chosen as they now are. Elbow-joints do not bear the operation so well as knee-joints. He (Dr. Dick) had broken down some elbow-joints, which had proved very successful; these were cases of rheumatic joints, some occurring after gonorrhœal rheumatism. Pus, he believed, was found in the joint in some cases.

Dr. ALLEN had seen a case where there was pus found in the left shoulder-joint; but he believed it was a secondary or pyæmic deposit.

Mr. LAURENCE said it was probably pyæmia, as pus was not found in cases of rheumatic inflammation.

The PRESIDENT believed that suppuration in a joint had never been found in rheumatic cases. He had heard this point discussed, and asked Mr. LAURENCE whether he ever observed pus in cases of rheumatic sclerottitis.

Mr. LAURENCE replied in the negative.

Dr. CAMPS observed, that pathological laws were rarely without exception. Many cases, for example, which were called rheumatism, were really neuralgia; and Dr. Brown-Séquard had frequently pointed out this error in diagnosis.

Mr. SEDGWICK mentioned a case of rheumatic ankylosis occurring in the little finger of a gentleman aged 50. Was this a case for forcible extension?

The PRESIDENT remarked, that the smaller joints are affected in old persons with chronic rheumatic arthritis; the larger joints in young people. In the case spoken of, he should use a tenotomy-knife, and then place the finger on a straight splint.

## EPIDEMIOLOGICAL SOCIETY.

MONDAY, NOVEMBER 7TH, 1864.

GAVIN MILROY, M.D., President, in the Chair.

PRESIDENT'S ADDRESS. BY G. MILROY, M.D.

THE PRESIDENT commented on some of the leading objects of the Society, and more particularly on the topography and geography of epidemic and certain endemic diseases. While the chief object of the other medical societies of the metropolis is the investigation of the physiological, pathological, and therapeutic relations of diseases, that of the Epidemiological is specially the study of their ætiological or causal relations, and the influence of locality, climate and season, diet and occupation, etc., on their rise, dissemination, and continuance. Diseases are looked at not so much in detail as in the aggregate; not in individual cases, but in groups and successions of cases; and not in one place only, but over wide and varied areas of observation, so as to embrace all countries and peoples.

The medical topography of our own country has hitherto received very little attention, although a subject obviously of great importance and interest. To take one example, that of the prevalence of ague in different parts of England: in the seventeenth century, intermittent and remittent fevers often raged in the metropolis like a plague. Both James I and Cromwell, not to mention many other men of note, died of the fever. It continued endemic in London until the latter half of last century; the Southwark side of the river always suffered much more than the north side. During the present century, there has been a striking decrease both in frequency and in severity of the disease throughout England generally, as the drainage of the land has progressed. The localities still chiefly infested are the Isle of Sheppey, parts of Essex, Cambridgeshire, Norfolk, and Lincoln; every year as agricultural improvements advance, the prevalence of ague diminishes. Scotland, according to Dr. Christison, is now all but exempt; although, up to the beginning of the present century, the malady was anything but uncommon in the Southern Counties. In Ireland, too, there is very little ague in the present day.

One of the most remarkable features of the medical topography of Ireland, is the wide-spread prevalence of ophthalmic disease from an early period down to recent years, as appears from the invaluable reports of Sir W. Wilde, on the Status of Disease in 1851 and 1861.

A highly interesting fact connected with the topography of Scotland is the comparative immunity,

according to Dr. Christison, of the resident labouring population of Mull, Lewis, and other of the Western Isles, from pulmonary consumption. The influence of different climates on the development of phthisis is a subject of the deepest interest, and has not yet been investigated on a sufficiently comprehensive plan. Much might be done to establish and to carry out inquiries illustrative of the medical topography of this country, by such associations as that of the Metropolitan Officers of Health in respect of London and its environs, and by the British Medical Association with its numerous and scattered machinery of action, in respect of England generally. Systematic and continuous observation and record in this field of research would not fail to be productive of much good.

In our colonies, too, a topographical examination of the sites of the principal towns and military stations is urgently needed. Bermuda, recently so disastrously visited by yellow fever, has been the seat of four successive invasions of the pestilence during the last twenty years; and, from what is already known, there seems to be no doubt that local conditions have much to do with its recurrent malignancy.

Hongkong is another instance of the necessity for such inquiries. The terrible unhealthiness of this colony for several years after its occupation is well known. Of recent years, the health condition of the civil population appears, from the late reports of the Governor to the Colonial Office, to have been decidedly improving; but the same cannot be said in respect of our troops. How, and whence, is this difference? Full and accurate examinations on the spot can alone throw light upon the subject.

But of all fields for medical topography, none can vie in point of extent, variety, and importance, with our possessions in India; and when the large number of medical officers scattered over this wide region is remembered, what an amount of more valuable information might be easily obtained!

The geography of disease is but an expansion of topographical medicine. Certain endemic and epidemic diseases exhibit a remarkable diversity in their geographical range, or distribution over different parts of the globe. The great work of Dr. Hirsch of Dantzic, *Handbuch der Historico-Geographischen Pathologie*, dedicated to the Epidemiological Society, contains a vast amount of most interesting details on this head. Few medical men are aware of the extent to which such a disease as goitre exists over the globe, and that the Valleys of the Himalayas and of the Andes, are as much infested with it as the Alps in Savoy and Switzerland. Neither are they aware that the true leprosy is in the present day so widely spread in very many countries both of the old and new hemispheres as it really is.

Another object aimed at, is the determining the geographical prevalence of an epidemic disease in any given season or year over wide regions, either of one continent or of different continents. Accurate information on this subject, and set forth on diagrams, or on outline charts, would cast much light on the natural history of such a disease, and would, moreover, serve to correct many prevailing notions as to the mode of its diffusion, and the proper means for its prophylaxis or prevention.

Lastly, there is the highly interesting object to ascertain and note the course or career of a moving migratory epidemic, as, for example, influenza and the cholera, step by step, and stage by stage, across different countries and continents, until, as on some occasions, the round world has been girdled by successive advances generally from east to west.

For the prosecution of such inquiries as those now indicated, the active co-operation of medical men not

only at home, but in all our colonies and professions abroad, as well as in foreign countries, is, of course, necessary. The medical officers of the army and navy enjoy singularly favourable opportunities for the study of epidemic diseases in the most varied regions and climates. Our professional brethren in the colonies and in India could also afford the most valuable assistance. It is only by widely extended and combined action devoted to one common object, that the many important problems in epidemiology and the science of public hygiene can ever be satisfactorily determined.

## WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, OCTOBER 21st, 1864.

GEORGE D. POLLOCK, Esq., President, in the Chair.

ON THE RELATIVE ADVANTAGES OF PUNCTURING THE BLADDER BY THE RECTUM, AND PERINEAL SECTION, FOR THE TREATMENT OF IMPERVIOUS STRICTURE. BY G. D. POLLOCK, ESQ.

WITHOUT going into the history of the various operations for impervious stricture, Mr. POLLOCK said he would confine himself to a comparison of the two mentioned in the title of the paper. Neither ought to be had recourse to, except in those cases in which the catheter cannot be passed; in which the patient cannot evacuate the bladder; in which the urine escapes in dribbles, or incontinently and continuously; and in which the patient has recurring attacks of retention, relieved by constant recourse to opium or the hot bath; and in which disease of the urinary passages and kidneys are threatening or developed. When the ordinary means of treatment fail—and they should always be first thoroughly tried—there are, for the impervious stricture, three alternatives. The first he alluded to only to condemn it—the forcible passage of the catheter into the bladder. It is always confusing, and uncertain in effect; and no catheter should be used for this purpose. Many disasters may also, as *post mortem* examinations reveal, attend this operation. The other alternatives are, perineal section, and puncturing of the bladder.

The first of these requires much care and correct anatomical knowledge; and, as the membranous portion of the canal is, usually, in retention, dilated behind the stricture, it is preferable to cut into it, and pass a catheter into the bladder, and then to unite the posterior pervious with the anterior healthy portion by cutting through the stricture. Among the difficulties of this operation, the urethra may be missed in cutting down to it; this has been known to happen to the most experienced hands.

In this operation, there is always some, and often considerable, hæmorrhage; at times, it is even excessive. Another possible evil is, that the wound may never heal, but become fistulous, although a free proper passage through the urethra may be restored. The author differed from Mr. Cock about the importance of tracing out of the stricture; even in the dead-house, it is at times very difficult to do so; and there is no objection to a part of the urethra being formed out of new tissue.

For one set of cases only did the author consider perineal section preferable to puncturing the bladder; namely, for inveterate and unyielding strictures in young men, the result of laceration of the urethra from injury, when extravasation of urine takes place, and often a large portion of the urethra is destroyed by slough. There seems no alternative in such cases. There is, moreover, generally, a healthy state of the urinary organs; and the constitution of the patient



is not generally impaired. In these cases, the stricture is the result of destroyed tissue from laceration; and no cases are more difficult to relieve by the use of catheters without division of the stricture. In these cases, the retention is not from spasm; but the result of the slow unyielding contracted cicatrix.

But for the greater number of cases of impervious stricture, the author believes puncture of the bladder to be the preferable operation; and, as being the most simple and effectual, the author recommends puncture by the rectum. In his own hands, the operation had been most satisfactory; both in stricture threatening to induce kidney-disease, and in retention.

The catheter should be fastened in with great care, and kept in for some time, the patient remaining on his back; nor is it injurious, if kept in for some weeks. And for some weeks, also, it is as well to keep the urethra quiet; and, at the end of that time, the surgeon will rarely fail to pass a catheter through it into the bladder. It is then wise to keep it there for a week or ten days; and after that, occasionally, according to the tendency to return.

When we compare the difficulties and dangers of the one operation, with the simplicity and safety of the other (puncture by the rectum), it would not be a bad rule for practitioners to adopt the latter in every case of retention dependent on stricture, rather than that an inexperienced operator should have recourse to perineal section. When it is considered that the one operation is always difficult, sometimes unsuccessful; always attended by bleeding, often by excessive hæmorrhage; always requires the aid of assistants, and must be performed in a good light; is followed by much discharge, and often by abscess or pyæmia; and that the stricture, when thoroughly relieved, has usually a tendency to recur;—when, on the other hand, puncture of the bladder through the rectum is simple, expeditious, relieves thoroughly, occasions no loss of blood, no local mischief, and, equally with perineal section, relieves the stricture; and that it is adapted to all cases except laceration of the urethra, and its consequent strictures;—we may fairly conclude that, as a general principle for the relief of impervious stricture, or for retention of urine in such cases, puncture of the bladder is the rule and perineal section the exception.

After the discussion, some coloured photographs of skin-diseases were exhibited by Dr. Balmanno Squire.

**AN EDITOR IMPRISONED FOR ALLEGED CALUMNY.** Dr. Wittelshöfer, the editor of the *Vienna Medical Gazette*, has been sentenced to imprisonment for four weeks for having made certain charges against the "Sisters of the Good Shepherd", who have the care of the public gaols and houses of correction. In the opinion of the public, the various witnesses called fully proved that the charges which had been made were well founded; but it would appear that the judges were not of the same opinion. When the Court passed sentence on Dr. Wittelshöfer, it declared that the nuns who had been calumniated were "the organs of Government". The State pays the "Sisters of the Good Shepherd" so much a head for the board of the persons who are under their charge; and it is notorious that the food provided by them is both scanty and bad. The holy women maintain that they save nothing; but it is a positive fact that they acquire real property in Austria, and make large remittances to foreign cities. During Wittelshöfer's trial, a most respectable banker declared on oath that the Superior of the establishment at Neudorf recently had bought of him a bill for 12,000*fr.*, which was made payable in Paris.

## Correspondence.

### TREATMENT OF PARTURIENT WOMEN.

LETTER FROM HENRY CANDLISH, M.D.

SIR,—The kind and quantity of aliment to be allowed to a woman recently delivered has been, from the earliest times to the present, a subject upon which considerable diversity of opinion has existed in the profession.

We do not now, however, regard pregnancy and parturition, *per se*, as diseases, but as vital, natural, and physiological processes; and it is known to be the experience of most mothers, that the happiest and healthiest period of their lives was when they were having and nursing their families.

But although, *per se*, they are natural processes, yet they are very frequently the cause of morbid action in other parts of the system. Moreover, during pregnancy, the system is rendered more plethoric. There is an increase in the fibrine of the blood; the pulse is somewhat quicker; and there is a greater tendency to fever and inflammatory action than at other times. Influences upon distant organs, in the shape of irritation and functional disorder, are excited by reason of the close sympathy and the community and reciprocity of feeling which exist between the uterus and other parts—no doubt, through the medium of the sympathetic nervous system. The nervous system also suffers, as evidenced by the change of taste and temper; and there is a peculiar excitable state of the mind. In all cases, there is a deviation, greater or less, from the ordinary condition of health.

In order to decide upon the most suitable diet for childbed, we must note the constitution of the patient; the changes which have occurred during gestation; whether there is any tendency to any particular disease; what has been the nature of the labour; what have been its effects upon the system; and whether the type of disease then prevalent be sthenic or asthenic. Were we to be arbitrary and conclusive, as to the food and drink, before we became acquainted with such determining circumstances, then would we cease in all verity and reality (whatever opinion might be entertained in regard to us) from being scientific and rational practitioners; and licensed empiricism would be a more fertile source of evil than good.

It were as easy to say in a breath what was the proper treatment for fever, so widely different in its forms, symptoms, virulence, and tendencies, as to say what was the exclusive plan to adopt, even as to diet, in the parturient state.

Not only in both will cases frequently arise demanding generous diet, stimulants, cordials, and support, which must be administered with the utmost regularity and exactness; but in both, cases of the very opposite nature will occur in which antiphlogistic treatment, low diet, and even depletion, are indispensably necessary. I have already stated that, amongst the earliest signs and evidences of pregnancy, is the influence exerted upon remote organs. Marked evidence of this is afforded in the want of appetite and morning sickness of the early months of utero-gestation. The stomach is unusually irritable and atonic. This morbid state, depending upon sympathy, commonly ceases before pregnancy has more than half advanced. At this time, however, the effect may be prolonged, or one similar may be produced by the operation of a very different cause;

viz., by the gravid uterus emerging from the pelvis, and gradually enlarging.

But a third event happens, equally deserving of a passing remark; and that is, what is termed the subsidence of the abdomen. With this change in position, there occur griping, tenesmus, frequent micturition, anasarca swelling of the labia and limbs from tardy venous circulation, etc.

The third stage is usually accomplished without much difficulty; and the relieved mother is all comfort and gratitude, but requires rest and quiet. After delivery, however, all danger may not be at an end; and the utmost care is necessary, lest shock and exhaustion be increased.

It would be very difficult to convince me that the tendency to milk-fever is "in the inverse ratio to the nourishment administered." It might, perhaps, be an easier matter to make me believe that it was in the direct ratio. To my thinking, however, it would be more correct still to allege that the possibility of the occurrence of puerperal ailments generally was all the greater the nearer the approach made to the extremes of depletion or repletion.

The proper treatment will, of course, altogether depend upon the type the fever assumes, and will vary as the one or other character predominates. I will now, in a brief summary, finish my remarks.

1. In cases of natural labour, and the subject a healthy woman, give mild unstimulating nutriment for a few days till the lacteal secretion has become established; after which she is to be allowed to return to her accustomed diet.

2. When the woman has been rendered very weak by tedious labour, hæmorrhage (whether unavoidable or accidental), or other causes, it is necessary to give nourishment, cordials, and stimulants, from the very first, carefully watching their effects, lest our anxiety and kindness thwart our purpose.

3. Where there is high arterial action, with a highly marked febrile state, in a robust, plethoric woman, low diet and antiphlogistic treatment must be adopted; but these must not be carried to an undue extent.

4. Where, in addition to the above, there is local congestion or inflammation, topical depletion must be had recourse to, in addition to constitutional treatment.

5. When there arises local complication in a delicate or phthisical subject, the system must be supported, and the treatment appropriate to the part affected be followed at the same time.

Let extremes ever be avoided. I am, etc.,  
HENRY CANDLISH, M.D.

Alnwick, October 23th, 1864.

#### LETTER FROM EDWARD CROSSMAN, ESQ.

SIR,—At the risk of laying myself open to the reproach of presumption, I venture to address to you some passing thoughts on the correspondence which has lately appeared in the JOURNAL, on the Diet of Lying-in Women.

There seems in the practice of the present day an unfortunate tendency to rush from one extreme to the other; and, in correcting one error, to fall into the arms of its antagonist.

In the present instance, until the publication of the letter of Mr. MacCarthy in the JOURNAL of to-day, there appeared to be only two principles of treatment advocated for the dieting of lying-in women—"the ordinary diet of health", or "gruel and tea".

Now, in order that either of these extreme principles shall be universally applicable, it is necessary that the condition of all women at the termination of labour be similar. But do we find this practically

the case? Do we find all our patients, at the termination of utero-gestation, in a similar condition as regards their vital energy? And do we find that the process of parturition is in all cases accompanied by an equal degree of exhaustion? Do we not, on the contrary, meet with every gradation, from almost robust health to the most extreme prostration? And do we not find that pregnancy and parturition exert an equally variable influence on the condition of the digestive system? Is it rational, then, to lay down a fixed rule to be applied to all cases?

Unquestionably, they are right who affirm the principle that parturition is to be regarded as a natural physiological process; and that Nature is therein to be interfered with as little as possible. But it remains still to be determined, in each individual case, to what extent the altered dynamical condition of the abdominal viscera, consequent upon the abstraction of so large a portion of the abdominal contents, has modified the organic powers; and how far Nature demands a suitable modification of the diet and regimen. And hence the true secret of success rests in the use of *common sense and discretion*—common sense to read Nature aright; and discretion in making a right use of what the dictates of Nature prescribe.

That the system of "gruel and tea", indiscriminately applied, is a most pernicious one, I have no doubt; but I am also convinced that we shall commit an equally grave error on the other side, if we bind ourselves down to the "ordinary diet of health" in all cases. Our object should be to harmonise our treatment with the dictates of Nature; and, while recruiting the vital powers, to avoid overtaking the digestive system.

I fully agree with several of your correspondents, in thinking that the subject required the ventilation which it is likely to receive through this discussion in the JOURNAL; for the majority of us, having been grounded in the belief that a low diet is absolutely essential for many days after delivery, have not had the hardihood to doubt or reason upon the subject, and have consequently continued in the beaten track. To such, I believe, the present discussion will prove most valuable, as making the first breach in an established custom, which has hitherto passed almost unchallenged.

In conclusion, I trust I shall be pardoned for suggesting that science will be best advanced by a discussion of the question upon its own merits, unencumbered by the weight of personality; and that the truth will be equally welcome, whether it have originally dawned from London or from Edinburgh.

I am, etc., EDWARD CROSSMAN.

Hambrook, near Bristol, November 12th, 1864.

#### LETTER FROM WILLIAM M. WHITMARSH, M.D.

SIR,—Having given great attention to midwifery, and been engaged for some years in getting a practical insight into all its most important bearings, I am tempted, after reading so many letters on the subject in the BRITISH MEDICAL JOURNAL, to trouble you with a few of the conclusions at which I have arrived, thinking they may be of interest to some of your readers; and as brevity is the soul of wit, I have endeavoured to condense what I have to say into the smallest compass compatible with clearness of meaning.

1. Nature has provided women with a parturient power in the same ratio as she has given a process of defæcation and micturition, all being regular in their action, except under very special circumstances.

2. Women rarely require help in the hour of childbirth, beyond dividing the umbilical cord after the



infant is born, malpresentation and retained placenta excepted.

3. If flooding, hour-glass contraction, contraction of the uterus round the neck of the placenta (often thought to be hour-glass contraction), and rupture of the uterus is to be avoided, ergot of rye should not be given.

4. If it be necessary to give ergot of rye, the best preparation is found to be ergot tea, made by putting half a drachm of the powdered ergot into two ounces of boiling water, letting it infuse ten minutes, and then adding a little sugar to make it palatable; this to be given to the patient every ten or twenty minutes according to its effects.

5. Ergot of rye should not be given, as it now is, on a very large scale (especially in poor class practices), in order to save time, but only where Nature has failed to do her part; that is to say, when labour-pains cease in the middle of a case, or go completely away towards the latter end, from the system being worn out through its ineffectual attempts to get rid of its charge; or in cases where it is found necessary to induce premature delivery, etc. In such cases as these, ergot is our sheet anchor, for it rouses the uterus magically, and, unless the pelvis be too small for the child's head to pass (which should be made out before ergot is administered), the uterus in nine cases out of ten gets rid of its burden; such cases then, as these, not forgetting flooding after expulsion of the fetus, are nearly all that require the use of this much abused drug. If Nature really required it, she would be at fault indeed.

6. Ergot, if given in too large doses, generally kills the child, besides producing many of the irregularities above mentioned. Much has been said respecting the sickness which arises after a dose of this medicine has been given, and to which it has been said, its efficacy is due. The opinion I have formed on this particular feature is, that it is mainly due to the extra strain put on the uterus, the stomach acting with it through sympathy, as it does in the early months of pregnancy; and I have frequently noticed that, when the pains are very great before the os is thoroughly dilated, sickness is sure to follow, but, as soon as the os allows the child's head to pass, the sickness abates or entirely ceases. This will appear more feasible when we look at first cases, as most women with their first child are sick. How is this to be explained? Only in the same way as we explain the action of ergot. The uterus is called upon to fulfil its function for the first time, and the parts yield very slowly; at last the patient becomes weary of her post, and makes many futile efforts to get rid of the child; this causes the head to press heavily on the os, and sickness sets in; but let the head thoroughly clear itself, and we have no more sickness. That sickness has a powerful influence on the uterus, I have proved; for in a large number of cases I have found that, prior to this taking place, the os was only dilated to the size of a crown, but after sickness the dilatation had more than doubled itself.

7. We should become disciples of nature, for nature helps those who help themselves, and to interfere with nature when she is doing her best, in order to save time, or because we have a large number of cases to see, is tempting providence, besides placing our own credit and the life of our patient in jeopardy.

8. As some general disturbance of the system takes place after childbirth, the patient should be treated according to her symptoms and stamina, no two patients going through this process alike. It would be as unwise to put a fat plethoric woman on a stimulating diet immediately after her confinement, as it would be to order a poor half starved anæmic woman water gruel and toast and water. I think no general

rule can be laid down; but still, taking midwifery cases generally up to the fourth day, a non-stimulating diet is best, as it keeps down milk-fever, milk-abscess, and a train of other diseases.

9. Instead of the dose of castor-oil generally given on the morning of the third day, an aperient saline mixture should be substituted, which, acting on the fibre of the blood, prevents too great an efflux of milk in the breasts, besides gently clearing out the intestinal canal; moreover, it agrees better with the patient.

10. From inquiry made into the practice of skilled midwives, it is found they are more successful than medical men, having a much smaller percentage of bad cases, which can only be accounted for by their being nature's accoucheurs, as they never use ergot, and have more patience than we have, thus proving that a successful accoucheur must be a non-meddlesome one, but ready when nature fails to do her part, of assisting her in the most scientific manner known.

I am, etc., WILLIAM MICHAEL WHITMARSH,  
*Fellow of the Obstetrical Society, London; Late Resident Surgeon at the Westminster Lying-in Institution.*  
Thanet Place, Hounslow, W., November 15th, 1861.

## Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 15th.

Ayres, Philip B. C., Bedford  
Blaxam, John A., Russell Square  
Bryce, Edward I., L.S.A., Frickley-on-the-Wreake, Leicestershire  
Bush, Richard H., York Terrace, Regent's Park  
Cameron, Archibald H. F., Edinburgh  
Clapp, Albert John, M.D., Queen's Univ., Ireland, Cork  
Cooke, Alfred S., Gloucester  
Davies, Thomas, Aberystwyth, North Wales  
Edes, Frederick P., M.B. London, Huntingdon  
Elliot, John, Stratford, Essex  
Green, Thos. W., M.D. Glasgow, L.S.A., Rawtenstall, Lancashire  
Groves, Joseph, L.S.A., Newport, Isle of Wight  
Hudson, Daniel, Rochester, Staffordshire  
Jackson, George, Plymouth  
Laidman, William F. M., Exeter  
Pearce, George E. L., L.S.A., Regent Street, Westminster  
Price, John E., Wrexham  
Ryder, Dudley H., L.S.A., Greenwich  
Saunders, Charles E., Clapham  
Smith, James W., Witley  
Waggoner, Albert, H.C.T., Dock Yard, Deptford  
Wolfe, Stanley, L.R.C.P., Plymouth  
Wright, David, Edinburgh

The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on November 10th.

Knibb, Jonathan H., Kniveto, Warwickshire; diploma of membership, dated November 11, 1862  
Pooley, Charles, Weston-super-Mare; May 1, 1862  
Russell, William C., Doncaster; April 1, 1861  
Waring, Edwin J., H.M. Indian Army; March 18, 1862

APOTHECARIES' HALL. On November 10th, the following Licentiates were admitted:—

Powell, Frederick, Westminster Hospital  
Powell, Llewellyn, St. Bartholomew's Hospital  
Scott, Robert John, St. Thomas's Hospital

As an Assistant:—

Joss, Adam Dawson, 57, Cannon Street Road

## APPOINTMENTS.

\*WILLIAMS, Charles, Esq., appointed Honorary Surgeon to the Norwich Dispensary.

VOLUNTEERS. (A.V.—Artillery Volunteers; R.V.—Rifle Volunteers):—

DAVEY, H., Esq., to be Hon. Assistant-Surgeon 1st Cornwall R.V.  
FRANK, J., Esq., to be Assistant-Surgeon 2nd Durham A.V.  
HARVEY, A., Esq., to be Hon. Assistant-Surgeon 20th Cornwall R.V.

ROSKRIDGE, T. H. A., Esq., to be Assistant-Surgeon 1st Administrative Battalion Cornwall R.V.  
WEBB, W. W., M.D., to be Hon. Assistant-Surgeon 14th Suffolk R.V.

## DEATHS.

GENT, John S., Esq., Surgeon, at Stony Stratford, aged 69, on October 31.  
HEAD. On November 11th, at 44, Harley Street, aged 30, Emma, wife of Edward A. H. Head, M.D.  
HEWITT. Lately, at Hereford Square, Old Brompton, Julia, widow of Cornwallis Hewitt, M.D.  
PRICE, Peter C., Esq., Surgeon, late of Green Street, Grosvenor Square, at Ventnor, Isle of Wight, aged 30, on November 13.  
SEAGRAM, William F., Esq., Surgeon, at Warminster, aged 88, on November 8.  
SWAYNE. On November 3rd, at Clifton, aged 42, Georgina Emily, wife of J. G. Swayne, M.D.

ROYAL COLLEGE OF SURGEONS. The next examination for the Fellowship will take place on November 22nd and two following days.

DR. P. W. LATHAM has been appointed Examiner in Chemistry and Zoology in the Cambridge University Local Examinations, and Assistant-Examiner to the Regius Professor of Physic and the Professor of Mineralogy.

CORONERSHIP OF EAST SUSSEX. Dr. Beard is candidate for the office of coroner for East Sussex. Dr. Beard is a man everywhere worthy of the support of his professional brethren. He is a Cambridge graduate, and assistant-physician to the Sussex County Hospital.

THE BRITISH ASSOCIATION. The first meeting of the Local Committee for the reception of the British Association for the Advancement of Science at Birmingham next year was held in the Town Hall, on Monday last, when £1500 donations were announced. From the tone of the meeting, there can be little doubt that the Association will have a brilliant reception in the midland metropolis.

DR. HENERY AND CO. At the Marylebone Police Court, on Thursday week, William Anderson, alias Wilson, was brought up from the House of Detention, and Alfred Field Henery, alias Osterfeld Wray, surrendered in discharge of his bail, to answer the charge of conspiring to defraud Captain M. A. Clarke. Both parties were committed for trial at the Central Criminal Court. Henery's bail was accepted, himself in £500, and two sureties in £250 each. The same bail would have been taken for Anderson, but none was forthcoming.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN. The annual meeting of the members of this Society was held on October 26th, in pursuance of the Royal Charter of Incorporation recently granted. A letter from the Rev. Arthur Stone was read, acknowledging a letter of condolence addressed to him by the Society on the demise of his father, their late President, Thomas Arthur Stone, Esq. The following officers and directors were elected for the ensuing twelve months. *President*, Martin Ware, Esq. *Vice-Presidents*, E. A. Brande, Esq.; P. M. Latham, M.D.; J. Bacot, Esq.; T. Turner, M.D.; D. H. Walne, Esq.; A. J. Sutherland, M.D.; E. Tegart, Esq.; G. Burrows, M.D., F.R.S.; J. Miles, Esq.; Sir J. W. Fisher; C. H. Hawkins, Esq., F.R.S.; and J. Paget, Esq., F.R.S. *Treasurers*, J. T. Ware, Esq.; G. H. Roe, M.D. (acting); R. S. Eyles, Esq. *Directors*, J. G. Forbes, Esq.; W. Munk, M.D.; B. W. Holt, Esq.; C. Miles, Esq.; W. J. Little, M.D.; W. Cathrow, Esq.; H. Sterry, Esq.; H. Jeaffreson, M.D.; H. S. Illingworth, Esq.; F. Hawkins, M.D.; T. B. Curling, Esq.; J. Hilton, Esq.; J. Love, Esq.; H. A. Pitman, M.D.; J. Adams, Esq.; R. Druitt, M.R.C.P.L.; J. C. Forster, Esq.; E. Tegart, Esq.; J. J. Sawyer, Esq.; H. Lee, Esq.; C. Collambell, Esq.; R. Quain, M.D.; G. Johnson, M.D.; C. F. Du Pasquier, Esq.

REQUESTS. By the death of the late Ex-Provost Johnston, a number of munificent legacies have fallen to the local charities of Arbroath, to the amount of £7050. The funds of the Infirmary have been augmented by £1000, to which Mrs. Johnston also adds £300; the Dundee Infirmary, £400; and to Baldoon Asylum for Imbecile Children, £400.

THE EDINBURGH UNIVERSITY CLUB OF LONDON. A correspondent writes: "I have seldom been more pleased with anything I have seen of the existence of Scottish feeling and respect for the University of Edinburgh among London men, than I was with what I saw of these at the recent quarterly dinner of the Edinburgh University Club. The dinner was this week attended by from fifty to sixty physicians. The chair was taken by the illustrious Dr. James Copland, F.R.S., author of the *Dictionary of Medicine*, an admirable scholar, and unrivalled in his knowledge of the literature of his profession. He was supported on the right by the venerable Dr. Roget, the Nestor of physicians, who graduated at Edinburgh in 1798. The chairman gave the loyal and other toasts with great spirit; and, in proposing *Alma Mater*, entered into an interesting sketch of the University of Edinburgh at the period of his own graduation in 1815. He had studied in the literary classes for some years, before beginning the professional part of his education; and he paid his homage to the memory of Christison and Dunbar, as well as of Robison, Playfair, Hope, and Jamieson, the last of whom the Doctor described as a Norseman like himself—he (the chairman) being a Shetlander, as Jamieson was an Orkneian. Dr. Copland then dwelt on the importance of keeping up the scholarly and social character of the medical profession; and earning by hard work the right to indulge in such social festivities as these meetings; the best man being he who did his duty equally well, whether at the bedside of the dying or the social board. The heartiness of the chairman, who is near his seventy-third year, but whose *physique* is as powerful as his intellect, gave a great zest to the evening, which passed off to everybody's satisfaction." (*Courant*.)

## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
TUESDAY....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M. A. Balmanno Squire, M.B., "On Diseases of the Skin caused by the Acarus"; Mr. Henry Lee, "On the different ways in which Syphilis enters the constitution."  
TUESDAY. Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Thomas Nunneley (Leeds), "On Vascular Protrusion of the Eye-ball"; Dr. Pidduck, "On the Causes and Prevention of Infant Mortality"; Mr. J. Morgan, "Ulcer of the Ileum communicating with the Bladder"—Zoological.—Ethnological.  
THURSDAY. Ro al.—Antiquarian.



# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

### ON SOME OF THE SYMPTOMS OF EARLY PREGNANCY.

By C. H. F. ROUTH, M.D., M.R.C.P., F.A.C.L., etc.;  
Physician to the Samaritan Free Hospital  
for Women and Children.

THE signs of the first period of pregnancy—i. e., from the date of conception to the fourth month—have always been a source of some difficulty. The principal symptoms, which need here only be mentioned, because they assist mostly the diagnosis, are, cessation of the menses; the purple colour of the vagina; the peculiar character of the urine, which contains kyestine; the velvety feel of the uterine cervix; the enlargement of the breasts and womb; with the peculiar character of the areola.

Excepting the presence of kyestine, the collection of which is sometimes not practicable, and an occasional appearance in the breast-areola, where white follicles containing a white secretion, of about the size of the heads of pins, are congregated in large numbers near the nipple, and extend outwards—a state of things which, I believe, is never found out of pregnancy—all the other enumerated symptoms may be due to other causes. The menses, we know, will cease from a variety of diseases. Patients with any uterine tumours, particularly older women and those who have piles and varicose veins on the legs, may have the purple colour of the vagina. The velvety feel of the uterus may be perfectly imitated by an ulcerated os. The breasts may enlarge, and the areola of the breast may look very suspicious, from mere uterine irritation. The womb may become hypertrophied from congestion. Upon the appearance of none of these can we implicitly rely, though in their general coexistence we have more confidence. It is for this reason that I have thought an additional symptom, which can be in most instances detected, might form the subject of an interesting communication; and as such I have ventured to bring it before your notice.

Hitherto much reliance has not been placed on auscultation in the first period of pregnancy. The so-called placental souffle, if heard at all, has been heard quite at the end of this period. Dr. E. Kennedy of Dublin, it is true, has given some examples in which he was able to hear it with certainty at the twelfth, eleventh, and even in one instance at the tenth week; but his experience has not been confirmed by others. Nägele states that it is only heard after the fourth month. Rigby admits that it can be detected as early as the fifteenth or sixteenth week. Murphy states that it is not generally heard before the fourth month.

Years ago, Dr. Rigby premised that there was every reason to suppose that it might be heard at a still earlier period, if the uterus were at this time within reach of the stethoscope. The object of this communication is to show the means by which I have attained to this end; and henceforward, I imagine, it will be in the power of all occasion-

ally to foretell pregnancy by this symptom as early as from the seventh week to the ninth, probably even from the sixth, when the placenta is situated near the cervix. At any rate, this is the earliest period at which I have heard the distinct souffle. At this early date, however, the sound differs somewhat from the placental souffle, as heard at a later period. Nor is it very easy to give an accurate description of it in words. It is more like the sudden cessation for a moment of a general splenic murmur. If I may so express it, it is a sudden interruption of an intensely vesicular and muffled murmur, synchronous with the pulse. This it is which makes it very difficult to catch sometimes, and which requires the closest attention and a most practised ear to make it out at all. I have also observed that the souffle, when it does occur at a very early period, and when very distinct, has somewhat a high pitch; so far confirming the opinions enunciated by authors, who have described it as assuming a piping character when the placenta is attached near the cervix. Curiously enough, in those cases where I have heard this high toned pitched murmur *per vaginam*, I have heard it very early also in the iliac region of one side.

It is but right, however, to add that, as with ordinary auscultation-sounds heard over the abdomen, so with these pelvic sounds, they may be absent altogether. Sometimes we may lose them at a sitting, and are not again able to find them. Thus much, however, I think we may safely conclude, that during the first period, and in a doubtful case, no examination is complete without the use of the vaginoscope.

The cases now related amount to nine, in which the pregnancy was detected as early as from the sixth to the thirteenth week. All but one were married, and therefore there was no object in deceiving me; and, as I saw them all purposely, and by special appointment, to make out whether pregnancy existed or not, no difficulties were put in my way in the examinations made.

Of course, these do not include all the cases which I have examined or noted particularly from the sixth to the thirteenth week; but they are fair samples among several others, a few of which I regret I have been obliged to set aside, as I omitted to note at the time the date of their first examination by me. In these also, however, the pregnancy was made out very early. I have named these several instruments which I now show you *vaginoscopes*. Perhaps, were I to adopt the plan followed in the words *stethoscope* and *ophthalmoscope*, it would be better to call them *coleoscopes*, using two Greek words, instead of a compound of Latin and Greek. The examination of the uterus was made with these instruments introduced within the pelvis in other ways. Thus, a flexible tube passed up *per anum*, with an earpiece at the distal end, answered for auscultation. This method, though, as it might be supposed, useful, was sufficiently disgusting to discourage any further attempts. I have also attempted to hear through the sacrum; but the indications here were very uncertain. Stethoscoping *per vaginam* is not new. I am told that the late Dr. Stroud had devised a plan to effect this, and, if I mistake not, some German author; but I have not yet been able to obtain their memoirs. An examination *per vaginam* does not, however, in these days, entail the same reprehension as formerly. Thus my facilities have been greater.

If a woman be placed on her side, with her legs very much flexed upon her abdomen, then auscultation may be readily made with a common stethoscope, provided the distal end be small, by pressing directly with it against the perineum. This, by the apposition of its internal surface, impinges against the

vagina and uterus, and so we can often hear sounds originating in the latter organ. Where, however, the woman is fat, and the perinæum thick, the sounds are muffled. In this case, it may be passed *per vaginam*, and made directly to impinge upon the uterus. With a glass syringe, in doing this, as the rubbing of the clothes is not heard, no exposure whatever is needed. The same auscultation may be made with the woman on her back, with a curved glass speculum such as I show you.

It would be quite a little history, were I to enumerate the several plans I have adopted in the hope of devising a more perfect instrument for the purpose. I have tried metal stethoscopes, bent at a right angle, sometimes using a thin membrane at the vaginal end, of India rubber. I have used metal tubes, with a membranous sac in the interior, so constructed that I might blow air into it at will, and make the sac more or less tense. I have used wooden vaginoscopes, with a membrane interposed, at the union of the vaginal with the external portion of the stethoscope, which was here enlarged so as to form a cavity of greater dimensions than on any other part of the stethoscope. This cavity I have made exactly elliptical, so that the sounds conveyed would be concentrated at a focus, and be carried thence by a tube to the ear, upon the principle of Mr. John Marshall's ear-trumpet. The object of the membranes and membranous sacs was twofold: to reverberate, and thus intensify in the cavity the sounds, as is the case with the tympanum. Secondly, the small apparatus with which it was connected, and by which it could be tightened or slackened at will, was to alter the pitch, so that sounds might be heard which the uterus might convey, on a membrane as tense as would produce the note conveyed by the womb-sounds. This, however, in practice, was found in no way to act as I expected. Sounds appeared to be equally well transmitted without as with the membrane, while a double membrane seemed rather to muffle the sound than otherwise.

I have even used a metal vaginoscope with fluid compressed within it by a membrane, to try if I could feel thereby any wave of pregnancy or fluctuation conveyed.

In the present stage of my inquiries, I have come to restrict myself to two varieties—the glass stethoscope, and the wooden vaginoscope.

There is nothing new in the first. It has been used for a long time; and glass has a signal advantage. It is a beautiful conductor of sound, and rather, I think, raises the pitch. At any rate, it enables you to hear more distinctly than with the ordinary wooden stethoscope. Add to this, it is very readily kept clean, and does not make any noise when rubbed against the clothes. This, as I before said, is a great advantage, and allows it to be used very modestly; and when manufactured in the shape I now show you—that is, long, and with a curve—is very easy of application. These were made by Mr. Maddox of London.

The second variety includes the single and the double vaginoscope. These were made by Mr. Coxeter. You will see that the vaginoscope, as I use it, is nothing more nor less than either the single or double wooden stethoscope, with elastic tube, to the distal end of which is affixed a wooden speculum. Occasionally I use a solid tube in lieu of an elastic one, made either of gutta percha or of wood. I am satisfied, however, that, were this manufactured of glass, it would be preferable.

These, then, are the instruments. One word now about their application in diagnosis.

My first business was to ascertain what were the normal pelvic sounds heard in a non-impregnated

woman. There may be none. Occasionally, where there is much uterine congestion or vaginal inflammation, you may hear a regular pulse. This is, however, rare, and is probably the vaginal pulse. Commonly, you hear the gurgling in the intestines, passages of wind like bronchial respiration, and of fluid. These sounds, curiously enough, I have not heard in pregnancy, except occasionally the pulse before referred to. I imagine this to be due to the non-transmission of sounds through fluid, which the uterus contains in the early as well as in the more advanced periods of pregnancy.

The murmur of fibrous tumours presents some resemblance to that of pregnancy. Having, however, so fully developed this subject in my Lettsomian Lectures published in your JOURNAL, and which I therefore trust are known to you, I need not dwell here on this subject. Suffice it to say, that the true *fibroid murmur* is tubular, and usually louder, and often accompanied with a thrill, and a single or double cardiac sound, synchronous with the first or both sounds of the maternal heart. The *placental murmur* is intensely vesicular, without thrill, and usually without the cardiac sounds conveyed from the mother, except under very exceptional circumstances.

CASE I. *Pregnancy: Souffle first heard by Vaginoscope at Thirteen Weeks and a Day.* Mrs. T., aged 26, first consulted me on or about May 29th. She had had one child. She last saw the catamenia on March 4th. She had occasionally morning sickness, without, however, bringing up her food. The breasts had not become larger. The areolæ were dark, but not very extended, full of follicles of the same colour as the areolæ, but becoming white on being stretched. The breasts were small and flabby. Auscultation revealed no sounds *per vaginam* or above the pubes. The os uteri was rather hard and patent.

June 10th. This patient had seen nothing since the last visit. She thought she was larger. She had felt very sick in the morning. The nipples were larger, and looked more oedematous; but she had been using glasses to bring them out. No sounds were heard over the abdomen. The os was not velvety, but rough and irregular from cicatrices. One blowing souffle was heard distinctly by the vaginoscope.

I saw this patient again on June 25th and August 13th. On neither occasion could I hear anything with the ordinary stethoscope. On the last occasion, however, there was no doubt of pregnancy. She had felt the child move for the last three weeks. The appearance of the breasts was marked. The uterus reached to the umbilicus, which began to project. The vaginoscope revealed distinctly the placental souffle. She was confined on December 14th, of a healthy, fully formed girl. Calculating 280 days back, this would fix the period of conception at March 10th. The foetal souffle was heard, therefore, first at thirteen weeks and one day.

CASE II. *Pregnancy: Thirteen Weeks: Souffle made out by Vaginoscope.* Eliza S., aged 23, single, had had connection with a man once about three months back. She last saw her courses thirteen weeks ago. There was no morning sickness. She stated she was growing stouter.

The breasts looked very suspicious. On both sides, the areolæ were enlarged. There were a large number of follicles, as well outside as inside the areolæ; several were congregated together, and filled with white secretion, which became very white on tightening. This appearance was more marked on the left side.

There was some dullness on percussion from three to four inches above the pubes, which might be due



to fat. A single cardiac sound was heard in both iliac cavities; no souffle. The os appeared soft and velvety; the uterus large. The vaginoscope revealed a continuous murmur, indistinct, yet occasionally resembling the placental souffle.

**REMARKS.** The appearance of the breasts in this case was so characteristic as to leave no doubt on my mind as to the existence of pregnancy. The woman, having no object in deceiving, was closely questioned as to the period of connexion, etc. My impression was, that she was less advanced in pregnancy than here stated.

**CASE III. Pregnancy: Thirteen Weeks: Made out by the Vaginoscope: Perhaps Eleven Weeks.** Mrs. C., a young woman, consulted me on February 24th, 1862. She had had one child, which died. Her husband had diseased her some little while previously, when she first came under my care, and was under treatment for syphilis and sore-throat, having taken first mercury, and then iodide of potassium.

She last saw her husband towards the end of November. She was unwell the next week; the show lasting only a few hours, and then passing away. The catamenia recurred next week, and lasted a day or two, and then ceased. She had seen nothing since. There was no morning sickness. There was considerable pain under the neck—a symptom which troubled her also very much in her former pregnancy. She complained also of some sore-throat. The left side of the velum was continuous with the uvula; over it, there was a small ulceration present, of about the size of a sixpence. This was touched with nitrate of silver.

The areolæ of the breasts were dark, chiefly on the right side. The follicles immediately around the nipple especially were large.

The os uteri was not very soft; it was rather hard and knotted, dotted here and there, but not ulcerated. Beyond the cervix, the uterus felt large and heavy, evidently containing some substance. Percussion yielded a clear sound above the pubes. No sounds were to be heard above the pubes with the ordinary stethoscope. Slight foetal souffle, of a very high note, was heard with the vaginoscope.

I saw this patient on June 30th, when all the signs of pregnancy were well marked. She was confined on September 30th, of a dead child. The practitioner stated the child to have been dead one month.

**REMARKS.** Reckoning this woman to have seen her husband about November 25th, and conceived the same night, this would fix the period at thirteen weeks. Her 280 days of pregnancy would, however, in that case, have ended on September 2nd. We must suppose, then, either that the child was retained beyond the 280 days *in utero*, or that she conceived subsequently to the last appearance of catamenia, a fortnight after seeing her husband. In that case, I must have heard the souffle by the vaginoscope at eleven weeks.

**CASE IV. Pregnancy: General Murmur, Eleven Weeks Two Days: Souffle, Thirteen Weeks.** Mrs. W., aged 28, married, had had one child. She was unwell once six weeks after her confinement, and since then had passed two epochs. She last saw the catamenia on August 26th. Connexion took place on the 31st. She never had morning sickness, but was sick at intervals. In the last pregnancy, she was unwell once after conception.

The breasts appeared large, darkish; but the areolæ was not very wide. The follicles were well developed, but of the same colour as the areolæ. Milk exuded from the breasts. The os was velvety; the uterus large.

November 18th. In reference to the last menstrual period, she stated it was brought on by taking very

hot baths; it was very copious, much more so than usual. This led me to suppose it must have been a regular period. Two days ago, she had a very severe fall, by sitting down while there was no chair present. This made her sick and uneasy. She took exercise, however, daily; lying down during other parts of the day. The breasts looked more puffy and cedematous. The areolæ and follicles were more marked. Auscultation betrayed no uterine dullness above the pubes. But, if deep pressure were made with one hand at the hypogastrium and one finger placed in the vagina, it might be felt to extend about two inches above the pubes. No ballottement could be detected. The os was velvety, slightly patent, so as to admit the tip of the finger. No sounds were heard with the ordinary stethoscope. With the vaginoscope, there was heard a general murmur, which appeared faintly louder at times, as if an abortive attempt to produce the souffle.

December 1st. The appearance of the breasts was more marked. The uterus reached to two inches above the pubes; it was also low down in the vagina. A placental souffle was heard indistinctly three times with the vaginoscope.

This lady was confined of a full grown child on May 29th, 1864. This would fix the date of conception, if she went the full period, on August 22nd.

**CASE V. Pregnancy Twelve Weeks One Day, made out by Vaginoscope.** Mrs. H., aged 31, had been married several years, but had no children. She was always more or less liable to endometritis and vaginitis, which seemed to have been brought on by habits to be condemned. On September 7th, she called upon me. The catamenia, which were always regular, had last appeared on June 14th, 1860. There was no dullness above the pubes. The breasts were well developed; the areolæ dark, well marked, and studded with follicles. The vagina was moist. The os had a velvety feel; the uterus was large. The vulva exhibited the well marked violet hue. No sounds were heard above the pubes; but by the vaginoscope, a faint placental murmur, occasionally interrupted, was distinctly heard.

This patient was again seen, when all the signs of pregnancy were indubitable.

**CASE VI. Femoral Murmur, Eighth Week: Vaginal, Tenth Week: Pregnancy: No Breast-signs.** Mrs. Louisa I., aged 38, first consulted me January 8th, 1861. She had been married sixteen years, and had had seven children, six of which were living, the youngest aged two and a half years. She complained of great weakness and sickness, with occasional intense headache and vertigo, which had persisted for the last two months. These symptoms resembled those experienced when she was formerly pregnant, only they were more severe. Previously to this, she had been weak and poorly all the summer. She also suffered much from sickness, which formerly occurred only in the morning, but was now repeated during the day. There was also much white leucorrhœa, and a sensation of sinking at the stomach. The catamenia began at 12, but she was not regular till 13; they recurred every three or four weeks, lasting five days. She was not always regular, but was so for three months prior to their present cessation. She last saw the catamenia about November 6th; they then lasted five days, and had not recurred since.

The appearance of the breasts and of the whole woman was that of a withered creature. The areolæ were very indistinctly developed; but she said that, even in her former pregnancies, they were always flabby. About one inch above the pubes, there was dullness. Over the femoral vessels, there was heard a sort of murmur, which might have been mistaken for placental. The os was soft, but not actually vel-

vely. It was very low down. The uterus contained a largish mass, and seemed to be rather pushed towards the left side. The ordinary vaginoscope emitted no sound. She was ordered creasote for the sickness, and a zinc and tannin injection.

January 22nd. To-day it was eleven weeks since she saw the catamenia. On close inquiry, she stated she did not believe that she had connexion with her husband prior to the Sunday or Monday following the cessation of her menses. This would fix the period at the 11th or 12th of November. Assuming that she conceived that very night, her pregnancy would be of ten weeks and one day. In general health, she was improved. To-day, by the vaginoscope, the placental souffle was heard distinctly and unequivocally.

CASE VII. *Pregnancy, Nine Weeks and Two Days, detected by Vaginoscope.* Mrs. S., aged 27, consulted me on July 5th, 1862. She had been married eight years, and had had three children, of whom one had died. The last was born December 17th. She was generally regular, even during the whole suckling period. She saw the courses last on May 1st; they were on her for three days. She had seen nothing since. She had slight morning sickness; but this was not usual with her when pregnant, except after taking food. The only reason why she believed herself to be pregnant was, the cessation of the catamenia.

Her breasts, she stated, were not larger, but the nipple was darker than usual, and there was milk in them. The follicles, however, were very characteristic of pregnancy, constituting the fifth variety of papule described by Dr. Earle; being like small pin-points closely congregated together, and quite white. At other parts, the papule were occasionally of the same colour as the areolæ.

No dulness could be felt over the pubes, nor any sound heard with the ordinary stethoscope. There was a doubtful souffle heard, however, with the vaginoscope.

The subsequent history of this case is not very satisfactory. I saw her again on July 19th and August 1st. I did not hear this souffle again. The only sounds were single and double cardiac sounds, heard in the iliac region and vagina. The os also was soft. The appearance of the breasts remained characteristic of pregnancy. I was, therefore, led still to believe in its existence.

CASE VIII. *Pregnancy detected by the Vaginoscope Seven Weeks after Cessation of Menses.* Jane H., aged 38, consulted me on February 3rd, 1861. She had been married seven years; and had had five children, and one miscarriage. The last child was born three years ago. She was regular up to about a fortnight before Christmas (say December 11th), when the catamenia stopped suddenly. She saw a slight speck upon the sheet a fortnight ago; she thought it came from the genitals, only as it was "smeary". There was occasional morning sickness, but it was more frequent in the afternoon. She believed herself pregnant. All her present symptoms resembled those experienced in former pregnancies, particularly the size of the breasts, which, before having been withered and flabby, had now become much enlarged. Her left leg swelled also more than the right, which she also observed in former pregnancies.

The areolæ were wide; the follicles well developed, especially superiorly, not inferiorly, around the papillæ. The follicles did not, however, whiten on tightening.

On examination of the abdomen, no sounds were heard above the pelvis by the stethoscope. The double vaginoscope revealed distinctly the placental souffle.

CASE IX. *Pregnancy made out by the Vaginoscope at Six Weeks and Two Days.* Mrs. Harriet D., aged 26, consulted me on January 9th, 1862. She had been married for four or five months. Of late she had not been well, suffering from cough. She complained of a good deal of pain over the back and kidneys. For the last day and night, she had had occasional pain in the breast, and sometimes in the back. She never had milk in the former. There was leucorrhœa of a yellow colour present, with pain beneath the left breast. She could not keep food on her stomach. The sickness was worse in the morning. She believed herself to be pregnant. She had the catamenia about seven weeks ago. She believed she last saw them on November 25th.

In the breasts, the areolæ were developed on both sides. The follicles in the immediate neighbourhood of the nipple were alone obvious. She stated, from her examination of her person, that the areolæ were larger and darker than usual.

On percussion, there was no dulness to be felt above the pubes. The uterus was found low down; the os rather inclined to the left side; the uterus large, evidently containing some fluid. Over the abdomen, on the left side, the stethoscope emitted no sound. Over the right iliac region, on deep pressure, a high pitched murmur was heard indistinctly. This last was heard at first, but also indistinctly, *per vaginam*. There being much sickness, she was put upon an acid (hydrocyanic) mixture and alkalies.

On January 23rd, I saw this patient again. I was unsuccessful in making out any sounds on that occasion. I felt the os only to be velvety. She complained, however, of great cough, for which a mixture was ordered.

I saw this patient again on the 30th. She told me she had been obliged to leave off all medicine. She had, however, felt much better up to yesterday, when, in straining to reach some clothes hanging up, she fell down. She was much shaken and made very sick, and brought up streaks of blood. She still trembled at the thought of her fall. Something like a placental souffle was heard in the left iliac region, close to the bone. On attempting to examine this patient *per vaginam*, I found the os velvety, and the uterus large; but the passage was bloody. She was sent home, but miscarried the same evening.

REMARKS. The termination of this case proves that she was pregnant. The position of the uterus rather to the opposed side, where the iliac murmur was heard, will probably explain why it was made out in this position so early. It might be said that the stethoscope, by hard pressure, could be made to impinge upon the surface of the right iliac arteries, whence, on the uterine side, it emanated. This, however, would not explain the sound heard *per vaginam*. It was certainly indistinct, but still sufficiently clear to make the diagnosis of the case pretty clear.

I have never heard anything like a vesicular placental souffle earlier than in this case. I do not say that it might not be heard at an earlier period. However, I do not search for it. My experience would lead me rather to expect to hear the general murmur occasionally interrupted, and to this I have before referred.

CONCLUSIONS. In four out of these nine cases, the proof of pregnancy was rendered indubitable by the delivery or miscarriage of the patient. In the remaining five, if we except Case VII, the progress of the case, although the confinement of the patient was not traced, was such as to leave no doubt. In No. 7, the appearance of the breasts was characteristic. The presence of milk might, however, imply its death. The same cause might in some measure



explain the single and double cardiac sounds produced by the ready yielding of the uterus, so as to allow, by the pressure of the stethoscope, the solid fetus to convey the arterial sounds from below. At least, this appears a plausible explanation. Thus far, I think, we may conclude that the above inquiries justify us in believing that very often we may, in a doubtful case, by means of the vaginoscope, obtain information which cannot be obtained by the stethoscope applied above the pubes. So far, the fact is important.

## Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### BIRMINGHAM AND MIDLAND EYE HOSPITAL.

THE SURGICAL TREATMENT OF GLAUCOMA AND GLAUCOMOID TENSION WITHOUT IRIDECTOMY.

Under the care of J. VOSE SOLOMON, F.R.C.S.

[Continued from page 488.]

**CASE XII.** *Chronic Sclero-choroiditis; Eyeball soft; (Glaucoma?). Vision and Tension restored by Intraocular Myotomy, aided by Medicines.* Mary M., aged 48, was admitted Feb. 26th, 1861. The right sclerotic was covered with minute vessels; the conjunctiva was healthy. The cornea, at its inner and lower fourth, was clear; the remainder was covered by thin patches of opacity. There was no pain. She could not see features; all objects were slate-coloured. She had iridescent vision; no flashes; the globe was soft. The symptoms had existed a month. Medical treatment was employed.

April 2nd. All objects were of a slate colour; the vitreous humour was turbid. Features were not recognisable. The eye was of normal size, but soft. The cornea was more arched than in the opposite eye. Intraocular myotomy was performed to-day; and was followed by a free discharge of watery fluid. In seven days, features were clear.

From April 16th to April 30th, a little grey powder, with conium, was given twice a day; afterwards, cod-liver oil for a month.

On June 4th, two months after the operations, the eyeball had acquired a normal tension. The sclerotic had a yellow shade; no vascularity. With a 16-inch double convex spectacle, the patient read small pica with ease. The optic nerve appeared tumid, blanched, and dull; the retinal vessels on the disc were normal, but their branches were short, and the one which passes towards the yellow spot was very slender.

*Past History.* She stated that fourteen years previously, the eye became suddenly red and painful; every object appeared as in a cloud. The vision went and came; rainbows surrounded a candle-flame. There were no flashes. After six months' medical treatment, vision was nearly as good as in the healthy eye. Six years ago, she had similar symptoms—recurrent obscurations, rainbows. She could not see the features of her baby.

**CASE XIII.** *Right Eye Amblyopia. Left Choroiditis. Tension not Excessive (?). Intraocular Myotomy. Great Improvement.* Mrs. K., aged 47, had worn 7-inch double convex glasses since the age of 10 (hypermetropia?). The right eye exhibited signs of a past choroido-iritis. The whole of the lens, except the

middle third, was covered by black pigment. The sclerotic was white and glassy, from atrophy of the subconjunctival areolar tissue. The field of vision was contracted. The sight was so imperfect that features could not be distinguished. Eight years previously, she consulted an ophthalmic surgeon, who declared the back of the inner eye to be inflamed. Since this, the sight had gradually failed, and the field of vision became contracted.

For the last four months, similar symptoms had affected the left eye, as led to the loss of sight in the right; all objects were enveloped in a mist. Reading was impossible. When the patient attempted to use the eyes, shooting pains affected them; even when at rest, they felt tired, and tight, as if covered by starch. Dark clouds and flashes were present. The pupil was dilated and sluggish; the sclera white and glassy looking (choroiditis).

After ten days of medical treatment, intraocular myotomy was performed on April 20th, 1860, for the relief of pain. It was followed by enlargement of the field of vision and clearer sight.

On May 4th, 1860, the left was submitted to a similar operation. Very little aqueous humour escaped. In seven days, vision was clearer. On July 10th, the patient could read two pages of an octavo volume, thread a needle, and sew a little. On Nov. 23rd, the right eye could distinguish features at three yards, and on bright days at five. The left eye bore more work than in July; and the vision was sharper. The pupil was larger than normal, and the expression of the eye was languid. The surgical treatment was supplemented by tonics. The patient stated that previously to the operation, the eyes grew worse daily.

**CASE XIV.** *Choroido-Retinal Irritation. Tension Diminished. Intraocular Myotomy. Great Improvement.* Mrs. E., aged 36, florid and healthy, came under treatment on April 24th, 1860. She had worn 10-inch double convex spectacles since 8 years of age (hypermetropia?). During the last seven years, she said, she had been near-sighted; and for four years—the last twelve months especially—the sight had diminished in vigour (amblyopia and hypermetropia). Bright objects occasioned great distress; light and the movements of the eyeball excited pain. Muscæ volitantes were present. There were no flashes. She could not read or sew with or without spectacles. The sight sometimes left the eyes for a quarter of an hour. The eyes were softer to the touch than natural. The pupils were of medium diameter; the external tissues and iris appeared healthy.

Intraocular myotomy was performed upon the left eye on May 4th; and on the right eye on May 15th. In a month, she could read and use her needle with comfort. On Nov. 30th, 1860, she wore 14-inch convex glasses, and could work her eyes on minute and near objects for long hours without distress. The features of persons were stated to be clear across the street.

These two cases illustrate the effect of my operation upon the general nutrition of the eye. The circulation in the choroid and retina was regulated, and the secretion of the vitreous and aqueous humours improved. Whatever the rationale may be, it will be admitted that the grand practical result desiderated in all treatment of disease was attained; namely, the restoration of a disabled and, in these instances, important organ to a state of usefulness and pleasurable enjoyment in the exercise of its function.

**CASE XV.** *Much impaired Vision from Chronic Choroid Disease; no Tension. After Intraocular Myotomy, Pearl Type was read; after Tenotomy of the Inner Rectus for the Relief of a Squint, the furthest Limit of near Accommodation was curtailed.* (From notes by

Mr. A. Bracey, Clinical Assistant, now House-Surgeon, E. F. aged 17, florid, healthy, and hysterical, although the catamenia had been regular since the age of 13, was admitted an in-patient on May 13th, 1862. Six years ago, her left eye became affected with a spasmodic internal squint and dimness of vision. In the course of two years, she suffered from flashes in the dark (photopsy), and pain in the eye and orbit.

When she squinted, the ocular pain was so great that she had to lie down. She could not face bright light, because it excited so much pain and dimness of vision. These symptoms lasted for a quarter of an hour.

In April 1862, the photopsy yielded to medical treatment.

May 20th. At whatever distance objects were viewed by the left eye, they appeared dim. She could pick out a few words of small pica type (Jäger's No. 5), but they were not clear. The choroid was much congested; it presented a narrow insulated patch of pigment at the outer side of the optic disc. The right eye was healthy. Intraocular myotomy was performed to-day on the left.

On May 30th, pearl type (Jäger's No. 2) was read with distinctness. The limits of distinct vision for small pica (Jäger's No. 8) were respectively four and a half inches and eighteen. In the right, they were four inches and thirty respectively. The squint remained just the same as on admission, which proved the impaired vision was not dependent on its presence. Subconjunctival tenotomy was now performed. In eight days afterwards, brilliant type (Jäger's No. 1) was read at three and a half and seven and a half inches, and No. 8 at three inches and fourteen inches.

*Resumé.* From a state of practical blindness as regards small type, the left eye was enabled by the operation to read pearl type.

*The removal of the squint had the effect of increasing the acuteness of vision in the operated eye, and of diminishing its near and far point of distinct vision for pica type.*

Before the squint-operation, the limits of accommodation in the left were, for small pica, four and a half inches and eighteen inches respectively; afterwards, three inches and fourteen inches respectively.

It is remarkable that the removal of the convergent squint should curtail the accommodation, inasmuch as it is generally held by authorities on optical accommodation, that the pressure of the inner rectus, with the coordinate contraction of the ciliary muscle, conduces to an increased refraction of the eye. I may remark, it has been recently asserted that the cure of convergent squint is sometimes a cause of hypermetropia.

[To be continued.]

THE FEDERAL ARMY. Dr. Barnes has been appointed Surgeon-General of the United States Armies vice Dr. Hammond, dismissed the service. The latter claims that his dismissal was occasioned by conspiracy, false swearing, and a malignant abuse of official power.

DEATH OF DR. BOWLER. Dr. John William Bowler was surgeon-superintendent of Portsmouth Convict Prison. He entered the navy in 1827 as assistant-surgeon. His last appointments were to the Victor, the Hazard, in which ship he took part in the operations on the coast of China, and for which he received the China medal. His last service afloat was in the Alarm, on the North America and West India Station, from which he returned in the summer of 1847. Dr. Bowler was a retired Deputy Inspector of Her Majesty's Naval Hospitals and Fleets.

## Transactions of Branches.

### HULL BRANCH.

ASCITES CURED BY ELATERIUM AND AQUA REGIA.

By JOHN H. GIBSON, Esq., Hull.

[Read October 7th, 1864.]

THE case which I propose bringing before your notice this day is one of some interest, inasmuch as it is one of a class of cases which very seldom indeed are amenable to the power of medicine; yet one which, in this instance, was not only relieved, but decidedly cured, until some fresh exciting cause may again induce its reappearance—it is a case of dropsy.

I am fully aware that it has been adduced that dropsy is not a disease, but merely a symptom of disease. Granted, that it must be the result of pre-existing disease in some important organ. I might therefore have classed this case as being one of a complicated disease of the liver and kidneys; and although, as you will see in the sequel, the liver must necessarily have been the main organ involved, yet, when the dropsy gave way, it was when the function of the kidneys began to be restored, and, indeed, when they were stimulated to act to an inordinate degree; and it was then, and not until then, that any hopes were entertained of reducing the dropsical effusion. The case is briefly this.

W. S., aged 36, a ship-master, accustomed for the most part to trade in tropical climes, was used to free living, but not by any means indulging so far as inebriation. He was of sallow complexion, dark hair and eyes, erect, and, up to the period of the attack of which I am about to speak, very stout, weighing sixteen stones, but very active. On May 30th last, he presented himself to me, after having come as quickly as possible from Alexandria, with the following symptoms.

That which to me was the most apparent, was the extreme sallowness of his countenance, and yellow and sunken eye. The abdomen was fearfully distended with fluid; the legs, up to the knees, were cedematous; fluctuation was most easily and distinctly felt. The whole surface of the body was jaundiced. The breathing was quick and difficult; he had a short dry cough; the pulse was small and quick. His surface was dry, not hot; the tongue foul and yellow; bowels confined; motions pale; urine scanty, brown, and albuminous.

The history he gave of himself was, that in January of this year he contracted chancre; but having to go to sea, the treatment was left entirely to himself; and, what with the blue pill he took, and the blue ointment he rubbed in, he became salivated. The chancres, however, entirely healed; but he suffered for a while from sore-throat and a coppery eruption, which might be in part, and indeed no doubt was, mercurial.

This mode of treatment was the cause of, or at all events was followed by, great and rapid emaciation; so that he weighed little over ten stones. This was about the latter part of April. Early in May, his stomach began to reject everything taken; his bowels most obstinately confined. He had great difficulty in walking, was very short of breath, and experienced sharp pains in the lumbar region, and in all the joints. At this time, there was no swelling of the abdomen, but scanty and thick urine.

About the 11th or 12th of May, on his passage home



from Alexandria, he began to perceive the abdomen to increase in size; and up to the 30th of May, when I first saw him, the increase of effusion was very rapid. During the latter part of the time, he had drank wine and gin, as he was ordered to do so by the doctor in Alexandria.

At first I ordered him grain doses of calomel with half-drachm doses of compound jalap powder night and morning, and a mixture of acetate of potash, digitalis, and spirit of nitric ether. This not acting as hoped for, I gave him drachm doses of compound jalap powder, and added taraxacum to his mixture. This failing, I changed the mixture and gave the dilute nitric and muriatic acids. His position still remained the same. The gums after a week becoming a little tender, I omitted the calomel, but the bowels did not act satisfactorily; the stools were yet paler and the urine yet scanty, but clear and lighter in colour. About June 17th, Sir Henry Cooper saw the case, when he recommended podophyllin in grain doses, and iodide of potassium with carbonate of potash. This was tried for eighteen days, when things were getting rapidly worse—the body getting more and more distended, and the bowels so obstinate that he had occasionally administered to him a grain of podophyllin, four of calomel, six of compound rhubarb pill, followed by a strong black draught. On July 4th, we returned to the nitro-muriatic acid mixture and calomel, and extract of colchicum, in two grain doses every night; and on July 11th, we began the use of elaterium in doses of one-eighth of a grain every night, a drachm of compound jalap powder every morning, and the nitro-muriatic acid mixture during the day.

On the 15th, Sir Henry Cooper and myself met for the purpose of tapping our patient, to relieve the distension which had become so great; but to our astonishment, we found less tension in the abdomen, and the symptoms generally less urgent, so that we determined to let him alone for the present, and persevere with the elaterium, compound jalap powder, and acid. From this time our patient gradually improved; and, what appeared to us to be the most prominent symptom effecting the improvement, was the—I may say—excessive action of the kidneys, a large chamber-pot of urine being passed from night to noon, as well as the gradual improvement in the fecal discharges and flow of bile. Early in September the medicines were relaxed, and early in October they were altogether discontinued.

At the present time our patient is actually robust; all swelling has entirely disappeared. He weighs about twelve stones, can take any amount of exercise, enjoys his food, and all the secretions are healthy and free. About eight weeks ago, I detected, on examining the abdomen, an enlarged condition of the left lobe of the liver; but by gentle mercurial inunction this is very much ameliorated, and is not the cause of any inconvenience.

This, gentlemen, is a case of great interest, and one which clearly shows that dropsy is produced by the direct agency of the blood vessels; by the obstruction afforded to the circulation through the liver and kidneys, and that its removal was as clearly through the direct agency of the blood-vessels as was its production, which is a fact but comparatively recently recognised. The absorbents used to be accredited with the work in removal of dropsies; but this obvious difficulty presents itself, viz., that absorption goes on most actively in dropsical patients, as was seen in my patient, where all the adipose matter disappeared, and he became wretchedly thin.

It must be confessed that our knowledge respecting the mechanism of absorption is neither complete nor certain; but I should be inclined to give to the

veins the credit of imbibing the serous fluid exhaled from the surface of the serous membranes, as well as the fluid contained in the areolar tissue in anasarca.

I ought to have mentioned that the anasarca of the lower extremities, which was excessive on my patient's first presenting himself, entirely disappeared in ten or fourteen days after treatment was commenced.

## READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By FRANK WORKMAN, Esq.

[Continued from page 516.]

*Polypoid Tumour of Rectum.* The next tumour of which we have record this year appears also to have been of the nature of a polypus, of nearly the size of a small orange, which was developed in the less common site of the rectum. The patient was a lad of about sixteen years of age, who had been under Dr. WELLS'S care as an out-patient at the hospital, complaining, amongst other symptoms, of pain and uneasiness about the rectum. The short time that it is possible to allow for examining out-patients led to these symptoms being at first regarded as due to simple prolapsus ani; but one day, the lad being worse, Dr. Wells visited him at his own house, and then discovered that he had a tumour in the rectum, which he could nearly extrude. He was accordingly at once admitted into the hospital, where the tumour was removed by Mr. G. May, who transfixed its neck with a needle, strangulated it by a double ligature, and then divided it below. It had a somewhat malignant aspect, and probably belonged to that class of tumours spoken of by Ashton, as being polypi of the rectum which should be early removed, as they have a great tendency to develop into encephaloid cancer. The boy recovered well from the operation, and has since left the hospital, but still presents a very cachectic appearance.

*Colloid Cancer of the Abdomen.* Dr. WELLS contributed a specimen of that rare disease, colloid cancer, with the following history. Richard Brookes, aged 52, was admitted into the Royal Berks Hospital, March 8th, 1864. He was deeply jaundiced, and had been so for six weeks. He made no complaint save of debility, but gradually became weaker and more emaciated, and died from asthenia on March 28th. His intellect, which was not very bright on admission, was little affected up to his death. On examining his abdomen on his admission, it was found to be exceedingly tense and hard over its whole surface; at several points were found hard nodules, varying from the size of a large walnut to that of a small orange. One of them was also found in the right groin—apparently in the spermatic cord. He did not seem aware of their existence, and could not give any account of how long they had been perceptible to the touch. He had no pain over the seat of these tumours nor elsewhere. The *post mortem* examination was unfortunately incomplete. The friends came suddenly for the body, and the house-surgeon had only time to open the abdomen over the liver, and excise a portion of that viscus. Over the excised part was seen the peritoneum loaded with a deposit of colloid cancer. It had the characteristic features of that form of malignant disease. When first examined, the gelatinous portion was well developed; as also the fibrous sheath or envelope in the meshes of which the jelly-like matter was contained.

Although the fact was unfortunately not proved by the *post mortem* examination, there can be no doubt, from the manner in which during life nodules were felt by the hand all over the abdomen, that the dis-

case extended over the whole of that cavity. This is more extensive than usual; as, when this disease attacks the peritoneum, it is usually limited to the great omentum. The gelatinous portion, when placed under the microscope, was found perfectly transparent; when a section of the fibrous sheath was so placed, nucleated and caudate cells became perceptible.

In Dr. Wells's experience colloid was the most rare form of cancer; he could not recall another case; but in the thirty-first volume of the *Medico-Chirurgical Transactions*, a parallel case was recorded by Dr. Ballard at the St. Pancras Dispensary, remarkable for the lengthened course which it appears to have run. The patient was a married woman, aged fifty-five, who some twenty years before had miscarried, and suffered at the time great pain in the epigastrium, and ever after was subject to flatulent distension of the abdomen after meals. At the age of fifty-one, the catamenia left her; and a medical man then examining her, told her that she had a tumour connected with her liver. For a while her health improved; but, after the abdomen began to enlarge, she suffered from vomiting, and with considerable pain, never of a lancinating nature; and in the beginning of 1848, she came under Dr. Ballard's care. He found, then, that the abdomen was generally enlarged and rounded, and the walls tense, save at the umbilicus, where they yielded readily to pressure. On passing the hand over the abdominal surface, seven or eight tumours could be felt, of the size of nuts; one also was attached to the bladder. There was a little resonance on percussion at the umbilicus and along the margin of the right ribs, but everywhere else dulness was complete and fluctuation perfect. To relieve the dyspnoea, it was resolved to tap her; but two punctures of the trocar only let out a little gelatinous matter. Two days afterwards, she died. At a *post mortem* examination, the abdomen being opened, no less than six quarts of gelatinous matter were removed from its cavity, superficially of a ruby tint, lower down of a pearly hue. The peritoneal surface of the abdominal wall was seen to be infiltrated with colloid in the form of nodules, and intersected with fibro-cellular bands forming loculi. On the right side of the abdomen were two large tumours; the lower of which was solid, the upper nodulated, with gelatinous matter. On the left side were the remains of a large sac, capable of holding three pints. This had contained a jelly more firm and opaline than that free in the cavity of the abdomen; with which, however, it communicated. The liver was of ordinary size; its peritoneal coat was infiltrated with colloid in most parts of the lower half, and in the left lobe had formed the tumour perceptible in life; its parenchyma was healthy. The spleen was enveloped in colloid. The stomach and intestines had their peritoneal coat infiltrated with colloid; but only at one spot near the extremity of the cæcum did it affect the muscular coat. The mucous coat was everywhere healthy. The fundus of the uterus presented some globular elevations of the ordinary fibrous character. The ovaries were replaced by fibrinous sacs, more or less lobulated, and containing gelatinous matter. Under the microscope, the gelatinous matter of the abdomen and the ovarian cysts alike showed the characteristic cells of cancer—simple, compound, and caudate. It is worthy of notice that in this case the disease seems to have presented three varieties in its form: 1. The ordinary locular form; 2. The encysted form, as seen in the ovaries and in the large cyst on the left side, the matter from both of which exhibited under the microscope genuine cancer-cells; 3. The free or uninclosed form, of which the large quantity of gelatinous fluid found free in the abdominal cavity is an example. This might possibly have originated in de-

generation of that which was originally simple fibrous dropsy; but it seems more probable that it grew directly from the diseased part of the abdominal wall.

*Hydrocephalic Fœtus.* Mr. YOUNG read a paper on a hydrocephalic fœtus which occurred in his practice. "On Thursday, November 26th, I was called to Mrs. C. in labour with her first child. She was rather short, but otherwise well formed and healthy. Lately she had been much embarrassed in her movements by the great size of the abdomen. Previously to my arrival, the membranes had ruptured, and I was told that the waters had quite deluged the bed. As she had no decided pain, I left her without making an examination. Next day, she still had only slight occasional pains; and I found the os uteri very little dilated, and the presenting part very high up, scarcely to be reached by the finger. Saturday passed with little change in the state of the patient. On Sunday, the fourth day of labour, the os was dilated to the size of a shilling, and the finger came upon a sharp edge of bone, which terminated somewhat abruptly, and beyond this the parts felt soft, but tense, not yielding readily to the finger. The diagnosis was that the edge of bone belonged to the parietal bone, and that the head was hydrocephalic. An injection of warm water was used to open the bowels, and as no signs of exhaustion yet appeared, she was left to the next day, in the hopes that then the os would be more dilated. On Monday, the fifth day, it was apparent that the long protraction of labour and sleepless nights were beginning to tell on her vital powers, and her pulse begun to rise. Pains were now stronger, and the os had dilated to the size of a crown, and the presenting part was lower. I asked Mr. Vines to see her with me that afternoon; and he agreed with me on the nature of the case, and the necessity for speedy relief. So, having emptied the bladder with a catheter, I punctured the child's head with the craniotomy forceps; a gush of offensive fluid followed, and continued running for ten minutes, filling a chamber-utensil of the capacity of three pints. I then proceeded to extract with the blunt hook, in which I experienced some difficulty, the scalp and cranial bones being pressed down on the face. The fœtus must have been dead a week, as its cuticle peeled readily, and smelt offensively. After extraction of the fœtus, the uterus acted efficiently, and expelled the placenta. The woman recovered without a bad symptom. The head of the fœtus, when stuffed with hay and stitched up, measured twenty-two inches from chin to vertex, and twenty inches in circumference."

These cases appear, from the remarks of the members on it, to be very rare; as those whose obstetrical experience was largest, could only cite four or five. In them the value of Barnes' dilators would be much felt, as, when once the diagnosis is made, the os uteri might readily be expanded by them, while left to themselves. The parts, as seen in the present case, dilate very slowly.

*Death from Poison and Diseased Kidney (?)* Mr. WALFORD gave the history of a case where death apparently resulted from a combination of poison and diseased kidneys.

A. B., aged thirty, a plumber, of intemperate habits and gouty disposition, bought some drops of a quack, by which he thought he had formerly obtained relief to his gout; twenty of these drops were to be taken three times a day. A little before seven p.m., he took sixteen drops, and left home apparently well, but soon afterwards began to exclaim that he was poisoned, and wished to go to the quack to find out the nature of the drops. On his way, a sense of numbness and faintness with great thirst prevented his proceeding; and after an effervescing draught at a chemist's,



he returned home, still complaining that his mouth and throat were hot, and that he felt numbed all over, as if he were swelling and his very eyes bursting. Mr. Walford was then sent for, and found him, about ten, P.M., with imperceptible pulse and contracted pupils, still speaking of the distressing numbness; his mental faculties were quite clear. On trying to move him, he fainted, and soon afterwards expired.

At a *post mortem* examination, the heart was found to be rather small, but otherwise healthy; its cavities nearly empty, and free from clot. The brain was also healthy. The kidneys, however, were intensely congested, and almost black; and the urine drawn off from the bladder was highly albuminous.

In view of this state of his kidneys, Mr. Walford did not feel justified at the inquest in ascribing the cause of death to the drops entirely, which the Jew vendor swore were composed of compound tincture of guaiacum, and the jury returned a verdict that the deceased died from natural causes. After the inquest, the Jew was so pressing that Mr. Walford should destroy the drops which he had taken from the deceased to examine, that he awakened suspicion; and after some pressure, he confessed that, besides the compound tincture of guaiacum, the drops contained some tincture of aconite, made by himself from an ounce of aconite leaves to a pint of rectified spirit, in the proportion of two pints of the latter to six of the former tincture.

Now, supposing that the Jew at all correctly stated the strength of the aconite in the drops, this case furnishes a most remarkable illustration of the influence disease of the kidneys has in intensifying the action of certain drugs; for not more, according to the proportions stated, than four drops of a weak tincture were taken, and this man—young, and apparently healthy—was dead in three hours, with evident indications of the poison under which he sank; whereas the smallest dose recorded to have produced dangerous symptoms on an adult is twelve minims, and from that recovery took place. It does not appear that the diseased kidney directly contributed to death in this case; for there was no coma, vomiting, or signs of uræmic poisoning. The fatal issue of the impaired condition of the renal organs seems to have been due to their not retaining the requisite capability to seize upon the poison and convey it out of the circulating fluid; so that a very small dose retained in the blood produced a rapidly fatal effect, while three or four times that quantity might have been borne, had the functional capabilities of the kidney been unimpaired. Other drugs besides aconite are much more potent in their action on persons suffering from renal disease—opium and mercury conspicuously so: a very small dose of the former, it is well known, may produce on such persons very alarming, if not fatal, effects.

*Large Calculus removed without Operation.* Dr. COWAN exhibited some remarkable specimens of stone of great size, and fitting one on another by well marked facets. He stated that they were obtained from a person now living, and without operation. It appeared that a female, who had prolapse of the uterus, passed some months previously an ounce of gritty matter at one time. For a year after no more passed, and she suffered extreme pain and difficulty in micturating. One day, when in severe pain, she felt something unusual in the vagina, and with her fingers removed the largest stone, and the rest passed spontaneously in the three following days, with great relief to the patient. The prolapsed uteri was of long standing, and the bladder much drawn down. The *Lancet* recently reported a similar case. Mr. Birkett exhibited some calculi removed from the bladder of a woman, who had suffered from prolapsus uteri for seven years.

Three months before, she expelled fourteen stones; these were analysed by Dr. Odling, and found to consist of seventy-five parts of phosphate of lime, and twenty parts of carbonate of lime, with a trace of triple phosphates, alkaline salts, and organic matter; it was curious that the proportions of carbonate and phosphate of lime were identical with those entering into the composition of bone. Mr. Birkett said that he had showed them to a medical man from Boulogne, who at once asked if the patient suffered from prolapse of the womb and bladder? Probably, therefore, that condition, by making it difficult for the bladder to completely empty itself, forms a strong predisposing cause to the formation of calculi.

*Extensive Subcutaneous Injury of Knee-joint.* Mr. G. MAY also exhibited a leg which he had removed, as an illustration of the extensive amount of injury which a joint might sustain without the skin being broken. The patient, a miller, had suffered a large millstone to fall on his knee, and when he was brought into the hospital, the infiltration under the skin was so great as to preclude accurate diagnosis of the extent of injury, save that it was clearly a case for amputation. This was accordingly performed; and, on the joint being laid open, it was seen that the tibia was split nearly its entire length, and one condyle of the femur completely detached, while yet the skin about them was entire.

*Cerebral Disease.* Dr. WELLS brought forward a case of cerebral disease that presented, in the absence of a history, some obscure features.

John H., aged 20, a painter, was admitted into the hospital June 4th. It was stated that he went to bed apparently well the night before, and was found this morning at six o'clock lying on the floor on his back unconscious, with stertorous breathing. This continued to be his state on admission, without any paralysis of limbs. The pupils were dilated, but acted sluggishly on exposure to light. He had no convulsions. The urine drawn off was copious, and not albuminous. There were no external injuries. His gums were marked with a blue line, and were spongy and fetid; and he was reported to have suffered from constipation and colic. Pulse 80. He was ordered mustard poultices; to take directly five grains of calomel and two drops of croton oil; to have his head shaved, and a blister applied to the top. June 5th. He lay in a state of stupor all day, with stertorous breathing. June 6th. He was rather more conscious, as he looked about, and appeared to recognise his mother. There was a good deal of congestion of the left lung, as shown by dulness on percussion and minute crepitations. Pulse 100. Urine slightly opalescent on boiling. He was ordered beef-tea and port wine, and mustard poultices. In the evening he became more comatose, and died in the night. June 8th. *Post mortem* examination. There was some effusion of opalescent serum between the convolutions of the brain. The ventricles of the brain contained a large amount of serous effusion. The left lung at its upper and lower portion was much congested; and there was a deposit of granular tubercles extensively occupying the upper portion of the left lung. There was some inflammation of the left pleura, with flakes of soft lymph at its base, and recent adhesions at the upper part; the lowest lobe of the right lung was bound down by old adhesions. The liver was large and fatty.

In this case, it was considered desirable to hold an inquest, as the man was lodging at a public-house, was a comparative stranger in the town, and had been at work the day previous to the commencement of his fatal illness, and, when found, was unable to give any account of himself. He had been complaining of colic and constipation for a few days before, but as he

was a painter, such ailments seemed naturally due to his business. When brought into the hospital, his state resembled that of uræmic coma more than any other; but his urine was at first quite free from albumen, and in all the cases of uræmic coma which I have witnessed, the albumen contained in the urine has always been largely abundant. The comatose condition was fully accounted for by the serous effusion into the ventricles, as well as by the opalescent serum which covered the convolutions of the brain, and in both of which localities it was largely effused; but it is not very clear what occasioned this effusion, though it was probably connected in its causation with the congested condition of the left lung. The upper part of that lung was studded with minute tubercular granulations, and one is therefore led to infer that the effusion in the brain might be due to this tubercular condition of the system. The kidneys were unfortunately not examined; but, in the absence of albumen in the urine, it is hard to assign a part to them in the cause of death.

[To be continued.]

## Reviews and Notices.

GUY'S HOSPITAL REPORTS. Edited by SAMUEL WILKS, M.D. Third Series. Vol. x. Pp. 400. London: 1864.

THIS volume of *Guy's Hospital Reports*, though only sixty pages larger than its predecessor of last year, contains nearly twice as many papers; the number in 1863 having been ten, while that for the present year is nineteen.

The first contribution, which occupies sixty pages, is the Fourth Decennial Report of the Guy's Hospital Lying-in Charity, drawn up by Dr. BRANTON HICKS. A document of this kind is scarcely capable of analysis in a review. It must therefore be sufficient to state, that the charity is an out-door one; that the number of women attended during the ten years (October 1854 to end of September 1863), and of whom records have been preserved, was 14,871; that the number of children born was 14,999, of which 14,376, or 95.6 per cent., were born alive; that the death-rate from all causes among mothers was 1 in 340—that of the previous twenty-one years having been 1 in 140.

"This improved rate is much owing to the diminution of 'puerperal fever', particularly of the toxæmic varieties. In the present report we have less than one case in 1,000; while in twenty-one years' report it was one in 234 cases. No doubt much of this result has been obtained by the attention paid to separating the attendant from other cases, whenever these diseases threaten." (P. 3.)

The second article is on the Treatment of Granular Conjunctivitis by Inoculation with Pus, by Mr. C. BADER. This somewhat remarkable proceeding has been tried under Mr. Bader's observation on 240 eyes, presenting granular conjunctivitis with and without pannus. The object is to produce acute supuration, and thus destroy the granulations. The cases treated have been arranged in various groups; in some of which the treatment is reported to have been beneficial, while in others it has failed, or has even appeared to act prejudicially. Mr. Bader writes temperately on the subject, and, as far as he can, points out when the operation should or should not

be performed; and also suggests various points for future inquiry.

Dr. HABERSHON next gives a paper on the Medical Preparations of Arsenic. He reviews the use of arsenic in ague, diseases of the nervous system, and skin-diseases; and lays down a series of rules for its administration.

The fourth paper is also by Dr. HABERSHON, on Two Cases of Disease of the Suprarenal Capsules with Bronzing of the Skin. These cases are brought forward in confirmation of the observations made by Dr. Addison and others. Dr. Habershon observes that, the more fully the disease is known, the more is it traced to the vaso-motor (sympathetic) nerve. Hence

"The sickness, exhaustion, compressible pulse, and failing power of the vital functions, are not peculiar to the disease of the suprarenal capsules; and even discoloration of a very similar kind is found in other maladies. Thus, in the exhaustion from long-continued lactation, there is great weakness, a compressible and irritable pulse, disturbance of the stomach, and very frequently patches of discoloration are seen on the forehead and face, as well as on other parts of the body. Here the vaso-motor nerve and the whole cerebro-spinal system are affected from exhausted uterine function; but the cause is a removable one, and the disease is therefore remedial; but in extensive deposit in the suprarenal capsule the sense of irritation and exhaustion to the vaso-motor nerve is persistent, and consequently the malady is progressive. In some instances of syphilitic cachexia there is general discoloration of the skin, with great exhaustion; but the disease is curable." (Pp. 78-9.)

Branches of nerve have been distinctly traced between the suprarenal capsules and the semilunar ganglion, and also between these bodies and the pneumogastric nerve. Drawings illustrative of this fact are given by Dr. Habershon.

The fifth paper is a Clinical Report, by Mr. BRYANT, on Inflammation and Tumours of the Breast, more particularly in reference to their Diagnosis. The author offers observations, in his usual practical style, on Inflammation and Abscess of the Breast, its nature, causes, seat, rapidity of progress, and treatment; on the Diagnosis of Tumours of the Breast, giving an analysis of cases of Adenocèle or Innocent Tumour, and of Carcinoma; and on the Clinical Examination and Diagnosis of Tumours of the Breast. He comments here on the general diagnosis of a mammary tumour; on the diagnosis of one caused by glandular enlargement or infiltration; on the development of cysts in mammary tumours; on the diagnosis of true cystic adenocèle; on the opening, ulcerating, and discharging tumour; on the value of the retracted nipple as a symptom; on the diagnostic value of discharge from the nipple; on the importance of enlargement of the absorbent glands, and of tubercular and general infiltration of the integument over the breast. He then speaks of excision, concluding his paper with the narrative of some cases.

The retracted nipple he believes to have been over-estimated as a diagnostic symptom of cancer.

"It may coexist with a cancer in the breast, as it may with some simple or innocent affection; but, on the other hand, a cancer of the organ may be present, unconnected with any such morbid condition. For a retracted nipple may be described as an accidental symptom in the development of a tumour. . . . Should



any tumour, simple or malignant—should any abscess, chronic or acute—attack the centre of the mammary gland, a retracted nipple, in all probability, will be produced; for, as the disease so placed will necessarily cause material separation of the gland-ducts, their extremities—terminating in the nipple—must be drawn up, and, as a consequence, a retracted nipple will be the result.” (P. 109.)

The sixth paper is one in continuation of a series by Mr. TOWNE, on the Stereoscope and Stereoscopic Results. The author is of opinion that the perception of form and of colour by the retina are functionally distinct; and that

“The causes which in ordinary vision tend to disturb the identity of the two retinal images are connected *exclusively* with form, since it is obvious that in form there will, from natural causes, constantly exist a slight discrepancy between the retinal pictures; while, so far as relates to colour, there can be no discrepancy, since images transmitted from identical objects must in colour be identical.” (P. 140.)

The paper is one of much scientific interest; but must be read in full, in order to be comprehended.

In the seventh paper, Mr. COOPER FORSTER relates a Case of Intestinal Obstruction, or Modified Obturator Hernia.

A woman, aged 38, was on March 20th seized with sudden pain in the abdomen, principally around the umbilicus. This pain continued at the time of her admission into Guy's Hospital on March 24th. She had also constipation, with vomiting. On admission, she stated that she had had a lump in her left groin ever since she was a child, but that this disappeared whenever she lay down, and never caused pain. No trace of this, however, could be found; but the left external abdominal ring was very large. The symptoms continued, in spite of opium and calomel, opium injections, and opium alone, up to the 29th; when, the vomiting having become decidedly stercoraceous, Mr. Cock advised that the left inguinal ring should be examined. The part was accordingly cut down on; but no evidence of hernia was discovered. She died two hours afterwards.

On *post mortem* examination, there was found to be a constriction of a small loop of the lower portion of the ileum. This loop passed through a constriction of peritoneum opposite the right obturator foramen, but within the abdomen. By this band the bowel was contained in a perfect sac, and strangulated. There was also a small but distinct sac external to the foramen, continuous with the internal one. The external sac was empty.

Mr. Forster regrets that in this case the abdomen was not opened and the source of constriction sought for during life. As to the mode in which the strangulation took place, he thinks that a small obturator hernia had existed for some time; that it was reduced by the action of the obturator externus muscle; but that the piece of intestine, instead of being returned into the abdomen, slipped between the peritoneum and the pelvic fascia, much in the same way as reduction *en bloc* occurs in the inguinal region.

In the eighth paper, Dr. HILTON FAGGE relates a Case of Aneurism, seated on an Abnormal Main Artery of the Lower Limb. The artery was a large vessel, on the right side, of about the size of the femoral artery, running parallel to the sciatic nerve. Between the tuber ischii and the great trochanter was an opening by which its interior had evidently communicated with an aneurism: it was impossible, however, to say whether the sac had been complete.

There was considerable effusion of blood underneath the gluteus maximus. The patient was a woman aged 46, who was admitted on August 15th, 1863, with pain in the leg, especially about the tuber ischii, with hardness and swelling. Besides internal remedies, morphia was applied endermically. She died on September 23rd. There does not appear to have been any diagnosis made of aneurism during the patient's life; but this will not be remarkable, when it is remembered that, previously to the present case, only three instances of a similar abnormal arterial distribution have been recorded.

Mr. BIRKETT, in the ninth paper, furnishes a Memoir on a Remarkable Case of Disease (a New Growth) affecting the Shaft of the Tibia.

The patient was a large fat woman, aged 43, who was admitted into Guy's Hospital with fracture of the tibia. There was nothing remarkable in the progress of the case until the end of about a month, when there was found to be a persistent painless swelling over the front of the tibia. The woman now for the first time stated that she had observed a swelling in that locality for about six months; but that it had never given her trouble. Between the seventh and eighth week after the accident, she left the hospital, able to walk; the limb merely being rather weak. In nine months she returned. Soon after leaving, the tumour had become painful; and the pain had at last become intolerable. The tumour was rather larger, and closely resembled, in outline, an ordinary node. There was some elasticity in the centre of the tumour. Mr. Birkett treated the disease as of inflammatory origin; and the patient left the hospital in a month, but slightly relieved. In seven months, she was again admitted. The swelling was a little larger, and perhaps a little softer; but the pain was agonising. Mr. Birkett accordingly cut into the tumour; and, some days later, the patient's sufferings having been increased, and the growth seeming likely to fungate, the limb was removed at the knee-joint. The patient died on the fifth day after the amputation.

The soft parts of the limb surrounding the diseased tibia were healthy; as was also the fibula. The new growth occupied the medullary cavity, and expanded its walls laterally and posteriorly; anteriorly, the compact tissue was destroyed, and there was a nearly circular hole. A microscopic examination of the growth showed a quantity of fibre-tissue, elongated cells, and nuclei. Floating about in the field of the microscope were nucleated cells, some with caudate ends, others without. There was not any milky juice pervading the growth, and to the naked eye it had a somewhat gelatinous texture.

Mr. Birkett thinks the growth belonged to the fibro-plastic group. He relates also a case in which amputation of the thigh was performed seven years ago for what was believed to be carcinoma of the head of the tibia. The patient has since enjoyed good health. He also gives a case of undoubted carcinoma of the femur in which amputation was performed—the patient dying.

In the tenth paper, Dr. A. S. TAYLOR gives some Cases and Observations in Medical Jurisprudence. These are: 1. Chronic Poisoning by Mercury through the Skin and Lungs: Death after four years. The patient was a furrier, and had been employed in packing skins after they had been washed in a solution of nitrate of mercury and afterwards dried. 2. Absorption and Diffusion of Mercury when taken in Medicinal Doses. 3. Case of Poisoning by Turpeth

Mineral (taken in mistake for æthrops mineral). 4. Case of Poisoning by Corrosive Sublimate: Death in seven days: no Salivation: Suppression of Urine. 5. Poisoning by Aconite. 6. Poisoning by Ammonia in Compound Camphor Liniment. 7. Poisoning by Alcohol: Fatal Effects of Brandy on a Child. 8. Poisoning by Nitrobenzole. 9. Poisoning by Aniline. 10. The Process for Detecting Chloroform in the Blood.

Mr. COCK reports, in the eleventh paper, a series of Select Cases of Aneurism.

"Amongst them are cases where extensive disease of the heart and aorta existed at the time of operation: also cases where pressure had failed: a case in which the common iliac artery was tied, with eventual success, after the suppuration of the sac: another in which the external iliac was tied, and which subsequently proved to be aneurism of the profunda: lastly, a case of lesion of the profunda, the true nature of which was not ascertained until after death." (P. 202.)

Dr. OWEN REES gives, in the twelfth paper, some Clinical Remarks on Calculous Disease. Dr. Rees comments on the common belief that the presence of a calculus in the kidney is always attended with obvious hæmaturia; and he cites cases to show that, in cases where all the other symptoms of renal calculus are present, there may yet be no blood in the urine. He believes that, in consequence of an undue importance being attached to the absence of this sign, cases of renal calculus have sometimes been treated as if the symptoms were those of gouty or hepatic derangement. Again, Dr. Rees observes that frequent micturition, though often observed in cases of renal calculus, is not always to be expected.

"One gentleman of my acquaintance almost suddenly was seized in the street with violent pain in the side and retraction of the testicle; and on hurrying home passed bloody urine and a calculus, which latter must have been in the kidney many months without producing any other symptom than an uneasy sensation about the loins." (P. 218.)

The pain in cases of renal calculus has been said to be more severe on one side than on the other, even when it exists on both sides. But Dr. Rees says that he has frequently met with cases where the passage of renal calculi has been preceded by all the ordinary symptoms, except pain in the lumbar regions—the discomfort being altogether referred to the sacrum. He also points out a peculiarity which attends the presence of a calculus in the right kidney.

"The pain in these cases is referred to the right hypochondrium. It extends downwards towards the umbilicus, but not to the lumbar region. There is a feeling of great distension over the colon, and the bowels are constipated. These are the symptoms so often regarded as significant of biliary calculus—an error easily committed if blood be not perceived in the urine." (P. 219.)

The thirteenth paper is by Dr. A. S. TAYLOR, and is entitled, Cases of Poisoning by Arsenic from External Application: Transference of the Poison from the Skin to the Stomach. The case was that of a girl aged 9, who died in February last near Halesworth. The poisoning was produced by the application of arsenic to the head for the purpose of destroying lice. *Apròpos* of this case, Dr. Taylor refers to and compares several others in which poisoning was produced by the external application of arsenic.

Dr. BRAXTON HICKS furnishes the fourteenth paper, on the Glandular Structure of Proliferous Disease of the Ovary; with Remarks on Proliferous Cysts. Dr. Hicks endeavours to show that the term "proliferous cyst" is misapplied; and that the disease which he describes is in reality a gland-disease, analogous to adenocoele of the breast. The cystic formation in the growths is accidental, not essential; and may be entirely absent. This paper is a valuable contribution to the pathology of "proliferous disease" of the ovary.

The fifteenth paper is by Dr. TAYLOR. It is on Death from Rupture of the Uterus. In this case, communicated to Dr. Taylor by Mr. E. Bedford and Mr. A. Roberts of Sydney, the uterus was inverted, and the child was expelled by gaseous putrefaction. (The *post mortem* examination was not made until a week after death; and there was considerable development of gas in the abdomen.)

Mr. BIRKETT relates, in the sixteenth paper, Cases of Inguinal Hernia depending upon Abnormal Conditions of the Vaginal Process of the Peritoneum. The cases which he relates are classed in the following order.

"1 a. Those in which the vaginal process of the peritoneum remained open along its whole extent.

"1 b. Those where a constriction of the vaginal process of the peritoneum constituted an impediment to the reduction of the hernia, and was the cause of its strangulation.

"2. Cases of hernia associated with malposition of the testicle.

"3. Those depending upon an open state of the funicular division of the vaginal process of the peritoneum.

"4. The cases in which the canal of the vaginal process of the peritoneum remains unobliterated, while its ventral orifice is closed, and a hernia pushes its sac before it along the open tube." (P. 263.)

Dr. PAYY, in the seventeenth paper, comments on the So-called Amyloid Degeneration. He gives an outline of the history of the subject, and then furnishes an account of some examinations which he has made on specimens of lardaceous degeneration in the Guy's Hospital Museum. He does not think that the iodine-test indicates the presence of starch.

"From the observations I have conducted, it has seemed to me that the coloration of the lardaceous matter effected by iodine has depended upon a simple absorption of the agent. My impression is that the coloration is not the result of a definite coloured product, like the product of union between iodine and starch or between iodine and dextrine, but is due to iodine as such, which is absorbed much more greedily, as it were, and held more firmly by the lardaceous deposit than by ordinary forms of animal matter. . . . Undoubtedly, according to my experience, the colour, in arriving at black, passes through shades of red and brown and not of blue. . . . There is another feature of disparity in the colour produced by the action of iodine on starch (dextrine agrees in this respect with starch) and on the lardaceous deposit. In the case of the former, the colour is immediately removed by the application of heat, but may be instantly restored by the influence of cold. In the latter, the colour only gradually fades, with the evolution of iodine as ebullition is kept up, and cannot afterwards be restored by the influence of cold." (Pp. 328-9.)

Again, in regard to the supposition that the so-called amyloid (lardaceous) matter must be non-nitrogenised, because of its reaction with iodine, Dr.



Pavy enumerates, as giving a blue colour with iodine, narceine and chitine, both of which contain nitrogen. Further, from analyses of lardaceous matter performed by Dr. Odling, it appears to be a nitrogenised material. The paper is concluded with some remarks on the pathology of amyloid or lardaceous disease.

In the eighteenth paper, Mr. JAMES HINTON relates two Cases of Chronic Impairment of Hearing improved after Scarlet Fever and Erysipelatous Sore-throat; and the Dissection of the Ear in a Case of Deafness in a Third Member of the same Family.

Mr. DURHAM furnishes the nineteenth and last paper, on Certain Abnormal Conditions of the Bones. After relating some interesting cases of Mollities Ossium, Mr. Durham gives a very instructive chapter on the statistics, pathology, etc., of the disease—the result, evidently, of extensive literary research and personal observation. In concluding, he briefly notices the treatment of the disease—observing that “there are already more lime-salts in the body than can be retained, and to give more only throws additional work on the excreting organs.” He believes that his examinations point out the direction which treatment should take; but defers his remarks to a future time. His paper is concluded with some pathological observations on Osteoporosis, or Porous Hyperostosis, especially of the Bones of the Skull.

This is the tenth and last volume of the third series of *Guy's Hospital Reports*; and the editor has, therefore, added to it a copious index to the ten volumes. The brief notices we have given of the papers will show that the majority of them are of direct practical value, while some are of high scientific interest. From some reason, the number is nearly double of that contained in the last year's volume. Is this because there has happened to be a greater abundance and variety of material at hand? or because an honourable rivalry has been stimulated by the issue of a similar work by the medical staff of another hospital? Whatever be the cause, we are well pleased at the result; and hope that the example so long and so well set by Guy's will be followed by other similar institutions. Of how great value would be the presentation to the public of the riches of medical and surgical knowledge which must exist in St. Bartholomew's Hospital, but which now lie hidden and—at least nearly—unprofitable.

**HINTS ON THE PHILOSOPHY OF EDUCATION.** By HUMPHRY SANDWITH, Sen., M.D., F.R.C.P. Lond. Pp. 58. London and Hull: 1864.

THE *Hints* of which this pamphlet consists were originally delivered by Dr. SANDWITH as a lecture last winter before the Hull Literary and Scientific Institution. His aim is to point out how Physiology and Psychology may be made subservient to Education. He lays down the following texts for the several parts of his discourse. 1. An enlightened adherence to the principle of an attention to the foundation of education on physiology and psychology pervades the writings and plans of all the best authorities on education, both ancient and modern. 2. He then points out the advantages of a course of instruction in harmony with the constitution of human nature and with the arrangements of society. 3. He next comments on the evils of misdirected, because unenlightened, education.

Dr. Sandwith has evidently paid much attention to this subject of great public importance; and his little work is well worthy of perusal by those who take an interest in the education of our youth.

## British Medical Journal.

SATURDAY, NOVEMBER 26TH, 1864.

### GOVERNMENT COMMISSION ON VENEREAL DISEASES.

THE Government, as represented by the Admiralty Lords and the Secretary of War, has appointed a Commission to inquire into the nature and treatment of venereal disease. Eight members of the profession form it; viz., Mr. Skey (the chairman), Dr. Balfour, Dr. Donnet, Dr. Kirkes, Dr. Wilks, Mr. Cock, Mr. Quain; with Mr. Spencer Smith as secretary. Dr. Balfour and Dr. Donnet represent respectively the Army and Navy Medical Services. The Committee has already commenced operations.

We know not what directions the inquiry may take; but, judging from the late action of the Admiralty, and the source whence the Commission immediately issues, we may perhaps conclude, that the main object of the Commission is to deal with the prophylactic treatment of venereal diseases. It is not very probable that a Commission can add much to our knowledge of the nature of syphilitic affections; nor is it very probable that its reports will in any way influence the present practice usually adopted in their curative treatment. Moreover, every one now knows that, in the case of syphilis, as in the case of all other communicable diseases, the best and most effective cure is one which prevents their communication—the spread of the diseases. Last session, as our readers may remember, an Act of Parliament was obtained through the influence of the Admiralty, which gives to the police, in certain garrison towns of this country, powers of a very extraordinary nature—unprecedented, we will venture to say, since England became a constitutional country. It gives inspectors power to take into custody any prostitute whom they have reason to suspect (from a constable's report) of being infected with syphilis. The absurdity and gross impropriety of such a regulation as this is manifest. To throw upon the shoulders of a police-constable the onus of diagnosing whether or not a prostitute is infected with venereal disease, is outrageous to reason as well as to morality. Probably, the Admiralty has already come to this conclusion; and having, so far, gained its object, is now feeling its way, through a Commission, to the establishment of a regular system of authorised prostitution. It must be clear to every one who has considered the subject that, if the police

is to superintend prostitution, it can only do so properly, and decently, and effectively, under a regular system of supervision; and that the chiefest part of the system is that which is engaged in the prophylactic treatment of venereal diseases; viz., the medical examination of prostitutes. Such a system, of course, involves the registration of prostitutes; and is, in a word, the introduction amongst us of the continental system—the taking of prostitution under its charge by the Government.

And such, we take it, must be the main subject proposed (though indirectly, perhaps) for the consideration of the Commission. The object of the Admiralty and of the War-office, in appointing it, is, undoubtedly, to learn how best to diminish the fearful amount of syphilis which, at present, so seriously destroys the effective condition of the army and navy; and it is absurd to suppose that any mere investigation into the nature of syphilis—any long and learned report concerning the varieties of chancre—whether there be one, two, or three kinds—whether mercury be or be not the great remedy—and so forth—can be of service in reducing the amount of this disease in soldiers and sailors. The question with the Admiralty and the Secretary of War—gathering their views from their recent proceedings in connection with the Communicable Diseases Act—evidently is not to learn how syphilis is to be treated when once it has taken possession of the soldier or sailor; but how to prevent the disease from finding its way into the bodies of the soldier and sailor.

If it be decided that this country is, at last, to adopt the system of “paternal” governments, and is to watch over and regulate prostitution, let it do so on a regular systematised plan; boldly and openly avow its intention; and carry out the scheme in as decent and dignified a fashion as such a proceeding can admit of. But we must enter our protest against such a deplorable regulation as that at present in operation; viz., which throws upon a police-constable the duty of deciding, in the first instance, whether or not a prostitute is affected with syphilis, which makes it the duty of the police to take into custody any prostitute whom he has reason to suspect is affected with venereal disease.

### IS HORSE-FLESH EDIBLE FLESH?

A CONFERENCE of Hippophagi, held at the Garden of Acclimatisation, answer this question in the affirmative. M. Delcroix argues it out in this way. The flesh of herbivori is, *par excellence*, the food of man. If every Frenchman had his proper allowance of flesh, nearly four times the present quantity consumed in France would be required for the supply. To fill up in part this deficit, the flesh of healthy horses must be utilised—of horses “unfitted by age and infirmity for other services.” The flesh of horses

and of oxen is much alike; every day the one is substituted for the other.

“During a whole year,” says M. Deeroix, “my family, friends, and acquaintances were fed at my table with horse-flesh or beef indifferently, and never knew the difference. That the meat of horse is a healthy meat, there can be no doubt. Many public societies have affirmed that it may be safely eaten as food; and, in fact, for fifteen years horse flesh has been eaten in Germany, Prussia, and Austria, where special slaughter-houses are established. Isidore Saint-Hilaire showed that horse-flesh has been eaten, at some time or other, in almost every quarter of the world. For the last two years, horse-flesh has been distributed to the poor at some of the charities in Paris. Of course, only those animals are killed which are useless for other purposes; and thus meat may be supplied at the rate of about a penny a pound. The flesh of the mule, it is said, is superior to that of the horse; and, what will appear still more surprising, the flesh of the donkey better than that of the mule!”

### DRUNKARD LUNATICS.

IN America, it appears, that, at the present time, drunkards are liable to be treated legally as lunatics. An asylum, the Binghampton, in the State of New York, was chartered by Congress in 1854. It was intended for dipsomaniacs voluntarily subjecting themselves to treatment. Since that time, further laws bearing on the subject have been passed by the legislature in April 1864.

“Sec. 5. Any Justice of the Supreme Court, or the County Judge of the county in which any inebriate may reside, shall have power to commit such inebriate to the New York State Inebriate Asylum, upon the production and filing of an affidavit or affidavits by two respectable practising physicians, and two respectable citizens, freeholders of such county, to the effect that such inebriate is lost to self-control, unable from such inebriation to attend to business, or dangerous to remain at large. But such commitment shall be only until the examination now provided by law shall have been held, and no case for a longer period than three months.

“Sec. 9. Said institution shall have power to receive and retain all inebriates who enter said asylum, either voluntary, or by the order of the committee of any habitual drunkard.

“Sec. 10. The committee of the person of any habitual drunkard duly appointed under existing laws may, in his or their discretion, commit such habitual drunkard to the custody of the trustees, or other proper officers, of said asylum, there to remain until he shall be discharged therefrom by such committee.”

This law has been passed, it will be observed, at a time when men in office reign supreme in America. However much it may interfere with the liberty of the subject, still we must all admit that it is a move in the right direction; and that the proceeding is every way worthy of our attention.

THE Danes carry their political disappointment somewhat fanatically on to the scientific field. When Langenbeck of Berlin visited Copenhagen last summer, he was rudely shown the door by some prominent doctors, with whom he intended to have con-



versation. Steenstrup, again, in reply to a scientific letter, has returned an answer, declining further correspondence with German *savans*, and concluding with "formerly your Steenstrup." Such a display of feeling is detrimental to the Danes and to science. The Danes will not continue, as formerly, to acquire their education in Germany; and, with narrowed resources, will lose the public before whom they have hitherto laid their performances. Dutch and Danish science is only known through German translation. Now, as Germans do not read Dutch, they are much less likely to read Danish. In 1848, the Danes drove away the distinguished astronomer, Hansen, because he was a German; and the English Admiralty afforded the funds for the completion and publication of the magnificent tables of the moon which had been observed and calculated by that philosopher. The Astronomical Society gave him a medal in recognition of his great services. We hope that these erroneous and suicidal passions will calm down; and that, in medical and scientific intercourse, at all events, the same rules of politeness and conciliation may be observed, which are recognised as the essential safeguards of the diplomatic intercourse of nations.

THE following remarks appeared in a leading part of last week's *Lancet*. It is a specimen of the method of attack upon the British Medical Association and its JOURNAL, of late incessantly employed by the *Lancet*.

"If evidence were wanting to show the waning power of the *Journal*, even amongst its *quondam* supporters, it will be found in the report of the first meeting of the directors of the Medical Provident Fund. That Mr. Carter of Stroud (whom the editor's abuse has somehow failed to abash), should succeed in throwing the Fund open to the profession contrary to the fulminations of the *Journal* was bad enough; but that Mr. Daniell of Newport Pagnell should have 'seconded', and that Mr. Paget of Leicester should have 'warmly supported the proposal', must have been bitter words to have to print in the *Journal*. But worse remains behind. The South-Western Branch sent up a resolution 'recommending that a request should be inserted in the *British Medical Journal*, that each member of the Association should communicate to the chairman his feelings in the matter, and that the wishes of the majority should be carried out.' Happily, the editor was spared immolation upon his own altar by the unanimous agreement of the committee to Mr. Carter's proposition."

The statement here made, and necessarily, also, the conclusions based upon it, are completely untrue. What will every honest man who reads that statement think, when we inform him that there did not, before the meeting of Directors was held, appear in this JOURNAL one single word, or hint of an opinion on our part, as to whether the Provident Fund should or should not be limited to the Association? We rebuked Mr. Carter simply and solely for his presumption and his impertinence; for his presumption in calling upon the profession to put pressure on

men like Dr. Burrows, Dr. Symonds, Mr. Carden, Mr. Heckstall Smith, etc., in order to force them to do that which to him, Mr. Carter, seemed good; and for his impertinence in telling a number of gentlemen, at all events as honest and honourable as himself, that they welcomed the Provident Fund rather for the sake of the Association, than for the sake of the men who chiefly needed it. We carefully avoided offering any opinion on the subject alluded to. Our words expressly were: "We have nothing whatever to say, as to the merits or demerits of his proposal." "The proper place for the discussion of all matters affecting the interests of the Society is manifestly the board-room of the Direction." (See JOURNAL, Sept. 10th and 17th, pp. 300 and 339.) We leave our readers to fix upon the *Lancet* the fitting term, which belongs to those who thus unblushingly publish statements so utterly and manifestly opposed to the truth; who make an untruthful statement, and then found upon it a series of false and injurious assumptions. Mr. R. B. Carter, we regret to add, appears to be imbibing the spirit of the protection and especial patronage which has been bestowed upon him since he commenced his attacks upon this JOURNAL. He, also, in the *Lancet* of last week, takes the occasion so willingly offered him, of perverting language, and of drawing from the perversion unwarrantable assumptions.

It is probable that some inquiry will take place into the cause of the outbreaks of yellow fever at Bermuda. From reports already afloat, it would appear that here, as usual, red-tape has been at his old, accustomed work. It appears, *a priori*, more than probable that, if the Army Medical Service occupied its true and rightful position, this outbreak would never have occurred at all; or, if it had occurred, would have been greatly mitigated in its effects. The *United Service Gazette* speaks as follows on the subject:

"It is alleged that the newly arrived regiment was landed at the infected port with the full knowledge that the pestilence was raging there, and that no precautions whatever were taken to prevent its spreading amongst the men. They were landed, we are told, and immediately marched off to small and ill-ventilated barracks, built, with the fatality which seems to attend all our barracks, in the most unhealthy part of the town; and, as they fell sick, which they speedily did in dozens, they were removed to an hospital wholly insufficient for their accommodation, and of which the very walls were reeking with the poison of contagion. We are told that the Commandant, Colonel Graydon, was over and over again appealed to by the medical officers to have the patients removed to some place where medical aid would have some chance of success, and that he obstinately refused; until, at last, the crisis had become so alarming as to overcome what may have been either his obstinacy or his indecision. Finally, we are informed that, when wiser counsels prevailed—when the untainted men were placed under canvas, and the sick removed to the quarters recommended

by the medical officers—the terrible disease began to succumb to treatment; and at the last accounts there were gratifying symptoms of improvement in the health of the garrison. There are various reasons given to account for this extraordinary conduct on the part of Colonel Graydon. Some of our correspondents allege that he was obstinate, and refused to be dictated to by the medical officer; whilst others attribute his conduct to timidity, and a reluctance to incur responsibility. Above all things, the hands of the medical officers must be strengthened, and their recommendations given all the force of commands, in circumstances when they, and they alone, can be competent judges of the measures that ought to be taken. It will not do to have questions of authority or etiquette raised when hundreds of valuable lives are at stake. When the ship is among the breakers, the captain hands over the command to the pilot who knows the coast, and who has been appointed for the special duty of steering her under such special circumstances. Another cry of decimated regiments has come home to us from the East; and we are told by the East Indian mail, that the 77th Regiment, stationed at Allahabad, was daily losing ten or a dozen men by cholera."

THE question of the contagious nature of syphilis was discussed by several master syphilographers at the Lyons Congress. Experiment and clinical observation have distinctly proved the contagious character of certain of the secondary accidents of syphilis, and of the blood of syphilitic patients. M. Rollet stated his experience. He demonstrated the fact of the transmission of syphilis, by reference to thirty-seven cases. In eleven of these, there was inoculation from chancre; in seven, from infected blood; in fourteen, from mucous tubercle; in three, from papular eruption; in one case, from congenital syphilis; and in one, from chancre of the amygdala. The experiments of M. Roberts show that, by inoculating at one puncture a mixture of the two kinds of chancre-matter, there are developed, first a soft chancre, and then an indurated chancre, followed by general infection. M. Lindwurm's experiments prove that, when the syphilitic virus is inoculated into a simple chancre, the simple is converted into an indurated chancre, and followed by secondary symptoms; and, lastly, as has been often practised at the Hospital Antiquaille, when the pus of a simple chancre is introduced into a syphilitic (indurated) chancre, there results the kind of ulcer called mixed chancre. M. Rollet considers that, in syphilitic vaccination, the blood alone is the agent of the contagion. M. Diday read a paper establishing the contagiousness of syphilis by means of syphilitic affections, by means of the blood, and of the semen. Syphilis, he affirmed, followed the general laws of pathology in this respect. He also suggested other possible sources of contagion, as, for example through the medium of parasitic animals. And on this head he related cases; and one of a young physician, a specialist, a pupil of M. Ricord, who caught the itch through impure connexion with a woman, and, three months afterwards,

was attacked with syphilis. In this case, which was a carefully observed one, there was no primitive chancre. The other case was similar in details. M. Diday compared these cases with those of congenital syphilis, supposing that the acarus might have here played the part of the semen which affects the ovule. The moral of both M. Diday's and of M. Rollet's remarks were in one sense alike. M. Rollet insisted on the examination of prostitutes with the speculum; and M. Diday proposed, as prophylactic measures, the absolute interdiction of intercourse to persons who have suffered from syphilis within three previous months, and the interdiction of marriage for at least a year after the disappearance of all syphilitic symptoms. M. Viennois took up the subject of syphilis transmitted by vaccination, and related some new facts on this head. M. Gailleton advised that, to prevent such accidents, the matter should not be taken from children under two years of age—*i. e.* free from congenital syphilis.

WE may anticipate from the general signs of the times—from the meetings of Branch Councils, etc.—that the Medical Council will probably assemble during the winter months—in fact, at an early moment. It necessarily must do so, if it intend, as we conclude it does, an operation upon Parliament—an alternative treatment of the Medical Act. The Pharmaceutical Society is, we see, already in the field with a Bill for regulating the qualifications of chemists and druggists. The English Branch of the Medical Council has held warm discussions touching amendments required in the Medical Act. We have already reminded our readers that the Council will gladly hear and discuss the suggestions of the profession on the point in question; and will, if they go to Parliament to carry out amendments, require all the aid and influence of the profession to back them in the proceeding.

THE Herefordshire Medical Association has issued its annual report, which tells of the progress generally of the profession.

"Five years since, when there was not even a list of the members of the profession, the Medical Act gave us *legal registration*, and, as a consequence, *legal recognition in the courts of law*. The whole profession was then divided into many independent bodies, granting their several licenses according to their own individual fancy; the same 'well abused' Act gave us a *central Council for the United Kingdom*. It was reserved for the present year to give us a *single Pharmacopœia*. It is true that the *British Pharmacopœia*, so expensively prepared, so studiously elaborated, and so long looked for, has proved also a disappointment, and unequal to the requirements of the profession. It is a grand step in advance, nevertheless; its worst enemies cannot pronounce it a failure; for quite irrespective of its merits or its demerits, we have now for the first time a *national Pharmacopœia*."



# Thirty-ninth Annual Meeting

OF THE

## ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

[Continued from p. 555]

THE fourth meeting of the Section for Anatomy and Physiology was opened by Dr. Schweigger-Seidel with a communication on the Structure of the Kidney. In expectation of a discussion between the *coryphæes* of histology, the room was filled to overflowing. In 1862, Henle published a monograph on the structure of the kidney, in which he described a new kind of tubules, which started from the contorted tubules, proceeded into the medullary substance, and, forming a loop, returned to the contorted tubules. Two or more contorted tubules were united by loop-shaped tubes; thus constituting a network of tubules entirely closed in itself, with no outlet. Now, these loops unquestionably exist; but it was doubted by many whether they actually had the connections described by Henle. Schweigger-Seidel, also, confirmed the existence of the loops; but believed them to be integral parts of the general channel of the tubules. Thus, a contorted tubule begins with a capsule round the glomerulus; it makes its windings in the cortical substance; it passes then continuously into a loop which runs into the medullary substance between the Bellinian tubules, out again towards the fasciculi corticales, and there passes into the tubulus rectus, which, uniting with others, forms the Bellinian tubule. In reply to Schweigger-Seidel, Henle stated that he had not found the communication of the loop-shaped tubes with the beginning of the straight tubes, by means of the undulating connecting-piece described by the former speaker. On cross-section of the hardened kidney, Henle found tubuli recti, or collecting tubules, and narrow tubules having an epithelium which differed in different parts of the pyramid. The light tubules disappeared towards the base of the pyramid; while, according to Schweigger-Seidel's explanation, both kinds of tubules, those with light and those with dark outlines, would have to be present in equal numbers. Henle believes that most blood-vessels enter into glomeruli; but admits, upon the basis of Schweigger-Seidel's preparations, which he examined, that a portion of the fine arteries does not at once enter upon the formation of glomeruli. Professor Gerlach stated that, in the kidneys of frogs and birds, the glomeruli could be easily injected, and with a greater pressure could be ruptured; the injected matter then filled the uriniferous tubules, and ran out at the ureter. My judgment in the matter, so far as a judgment can be formed by hearing all sides, and seeing a few preparations, is, that neither Schweigger-Seidel's nor Henle's theory fully explains the anatomical matter of fact; and I am inclined to consider Luschka's theory as the one at present most satisfactory; according to which the tubuli contorti run into the tubuli recti, but are besides united by the loops. This theory was not discussed at the meeting; which is much to be regretted, as it is already contained in Luschka's Anatomical Treatise, and would, no doubt, have enlisted the sympathies of many, who went away in doubt.

Professor Schaaffhausen then exhibited casts and photographs of the Neanderthal bones; and showed that the opinion which made the skull which was found amongst them the type of a peculiar race, was

also supported by the scrutiny of the rest of the bones of the skeleton. The length of the bones of the upper- and fore-arm, the shape of the pelvis and of the head of the femur, all indicated that the man in question had belonged to a race much inferior to the present inhabitants of the Düssel Valley, and closely resembling very low races at present living in other parts of the world. He showed photographs of the last seven natives of Van Diemen's Land, which had been taken there by the English Bishop Nixon. Some show so great a similarity to the monkey, particularly in the structure of their faces, as is not found in any other race of human beings. Nixon found it quite impossible to convert them to the Christian faith. Schaaffhausen then made some remarks on a skull belonging to a later period, which had been found near Nieder-Ingelheim, together with arms made of slate, and fragments of coarse pottery. Professor Welcker exhibited a modern skull, which had been sent for that purpose by Dr. B. Davis; it showed some resemblance to the Neanderthal skull. Professor Vogt said that he divided the oldest skulls into several groups. Some are found in the same places with the inhabitants of caverns and stone implements (period of the cavern-bear). Others come from the time in which a northern fauna extended far into the south, the period of the reindeer. During this latter period, the implements were created somewhat artistically. To this period belong the Basque skulls found in the caverns of the South of France. The third group comes from the time during which the Swiss lake-dwellings were built and inhabited, or the Danish kitchen-middens formed. The stone implements of this period were ground. Professor Vogt also distinguished another kind of monkey-like skull, which had been found in Swiss graves of the later Roman period. There was a legend that they were the skulls of Irish missionaries of the earliest Christian time. Professor Vogt, therefore, termed this kind of skull apostle-heads. I was much surprised to hear this story repeated by the Professor in an assembly of learned men. For my readers should know that he had told it for the first time to a mixed audience at Neuenburg, to whom he delivered his Lectures on Man; and had then embodied it in the German edition of these lectures. The skulls are, no doubt, monkey-like; but their Hibernian origin is not supported by a tittle of evidence. I hope that this blot on the otherwise good and interesting lectures of Professor Vogt may be removed before the English translation is issued by the Anthropological Society. It was admitted, during the discussion, that the general features of the ancient skulls are all represented in some few specimens of modern skulls, but that their special characters are less marked; an opinion having some analogy with that enunciated by Owen, that in each race a few individuals repeated the characters of other races, while their own peculiarities went to the background. The above opinion, regarding the Basque skulls and their derivation from the reindeer period, finds a remarkable support in the similarity of type which, to the present day, subsists between the Basque and the Laplander. The Laplander has kept the reindeer; the Basque has been deprived of it by the change of climate. Both have kept, not only their anatomical configuration, but also their economy of the dairy—the Basque substituting the cow for the reindeer. Thus, the ethnology of the present supports the conclusions derived from geology and the anthropology of caverns.

Professor Henle described a new element of the external granular layer of the retina; namely, elliptical balls, which were not cells. The long axis of the ellipsoid stands at a right angle to the surface of the retina. The ellipsoids are arranged in regular

rows; and some are fastened to each other by projections. The structure is specific, and belongs specially to the optical apparatus, as well as the cylinders or rods. If the layer of cylinders and granules be termed the musivic layer, on account of the mechanical disposition of the particles, the other granules may be termed nervous. These latter layers of granules are twice repeated, cells intervening. The circumstance that the musivic layer contains no fibres and no vessels is a physiological problem of the greatest interest. Some have stated to have seen fibres; but have, no doubt, mistaken products of coagulation for such, or otherwise misinterpreted what they have seen. The external granular layer contains, however, in some parts, as on the yellow spot, an indubitable layer of nervous fibres. The Professor, also, stated, that eyes hardened in chromic acid were unfit for demonstrating the point in question. He microscopically showed what he had propounded; but I did not learn how the specimens had been prepared or hardened to be fit for section. Professor Winther of Giessen related some experiments which he had made upon the eyes of animals, in order artificially to induce pterygium and arcus senilis. The former he caused by tying the ciliary vein, or introducing a piece of horse-hair underneath the conjunctiva; the latter he produced by tying one of the muscles and its artery. Dr. Fromman of Weimar described the minute structure of ganglionic cells in the anterior cornu and spinal ganglia. When he examined them in white of egg, he found that they had a fibrous structure, and that fibres ran into the branches of the second order; in the cell itself the fibres separate in the shape of brooms, and a few pass into the nucleus. When the nucleus was ruptured, very fine fibres could be discerned, which were in combination with the nucleoli.

In the Section for Gynæcology, Stamm repeated his attack upon puerperal fever, which he had delivered in the Medical Section. He dilated upon the discovery of Semmelwies; and insisted that, besides the cleanliness of things and hands, the purity of the air in the lying-in room was the most important condition of the well-being of puerperæ. In all lying-in places, where there was not a sufficient system of ventilation, the rooms must be changed daily; in places where ventilation was tolerable, it was sufficient to change the rooms twice a week. This principle was applied in the Lying-in Hospital at Vienna with the greatest success. He believes that if it were generally applied in Europe, some thousands of women could annually be saved. Dr. Fulda demonstrated a preparation coming from a woman who, several years ago, had been successfully delivered of a child by means of Cæsarian section. Dr. Birnbaum of Giessen, assistant-physician at the Lying-in Hospital, showed a pelvis with many exostoses. The person from whom it came had acute morbus Brightii and eclampsy. In consequence of these conditions, premature labour was induced by the method of Cohen; but the dead child which was born was one of nine months. The mother died an hour after the birth, of apoplexy between the dura mater and the brain. The exostoses, Dr. Birnbaum considered to be of a rachitic origin. Councillor of State Froben of St. Petersburg read a contribution on Hysteroplasmata; and distributed a monograph by Panik, entitled *Discovery of the Organic Connection between Tuba and Ovary*. With this, the section was definitively closed.

In the Section for Surgery, Dr. Benno Schmidt gave an account of an urinary calculus, which broke up spontaneously, and showed the fragments. Dr. Horn of Bremen spoke on perforation of the trachea by means of a new instrument, the tracheo-perforator

of Dr. Rolfs. Dr. Robert of Wiesbaden thought this instrument somewhat too voluminous for small children. He had operated twenty-four times, mostly for croup; and of twenty-one such patients, had saved thirteen. Dr. Klein of Stuttgart described a new tracheotomy by Bruns of Tübingen, consisting of a trocar covered by two blades. He also related a case which was operated with it; but it terminated fatally by hæmorrhage.

In the Section for Physics, there were some interesting experiments by Poggendorff and Buff upon Ruhmkorff's coil. Dr. Prestel described an instrument which will be of use to meteorologists, a new atmometer. The vessel in which evaporation takes place stands in connection with a vessel containing air and water. As soon as the level of the water in the evaporator sinks below a certain point, air enters, and water leaves the reservoir. The latter being graduated and measured, admits of easy determination of the amount of evaporated water. Dr. Greiss communicated the curious fact, that all turning chips of iron are permanently magnetic. The South Pole is where the chisel entered first, and the North Pole where it ended its action. Professor Bohn showed a saccharometer by Wild. Professor Jolly of Heidelberg exhibited a little high-pressure steam-engine, which could be worked by means of a gas-flame. He also showed that it was very useful for many things in a physicist's laboratory.

The Section for Mathematics and Astronomy had, for the first time, an astronomical subject under discussion. Dr. Weiler spoke of a linear transformation, which simplified the differential equations of motion in the theory of the moon. It was the same transformation which Jakobi had used in his essay, *On the Elimination of the Knot in the Problem of the Three Bodies*. Thereupon, the meetings of this section were closed.

The Section for Mineralogy discussed the causes of the appearance offered by so-called changeable or shot carnallite, the natural chloride of potassium, which is raised from the mines of Stassfurt. It was admitted to be due to the dispersion in its substance of fine crystals of an iron oxide, which Bergrath Bisshof, the Director of the mines, had declared to be crystallised oxide of iron (Eisenglanz). But the Geheime-Bergrath Nöggerath declared the minute, chameleon-like, hexagonal plates to be a mineral "Göthite" differing from Eisenglanz by containing water of crystallisation. This appeared to Mohr, well known by his analyses with standard solutions, to be rather paradoxical; and he, therefore, spoke on the dehydration of minerals in concentrated solutions of salt. But he was met by a greater paradox related by Rose. This chemist had observed a specimen of hydrated oxide of iron, which was kept under water, to become anhydrous. Dr. Tschermak of Vienna spoke on the composition of different kinds of feldspar, notably adular, albit, and anorthit. There were interesting incidents connected with this paper concerning the doctrine of isomorphism. After much discussion, and a communication by Professor Reusch, on changeable or shot crystals, the meeting closed.

In the Section for Psychiatric, Remak repeated what he had stated in the Medical Section on the treatment of psychical diseases by means of the constant electrical current. Dr. Snell reported upon a new lunatic asylum at Hildesheim, in which the patients, forty in number, were caused to perform agricultural labours. He said that this experiment was new for Germany.

The Medical Section was, as usual, opened with the distribution of a vast number of pamphlets, which were eagerly accepted by the audience. Dr. Rosenstein then made a communication on the affec-



tion of the kidneys which sometimes follows after intermittent fever. He said that this was a disease to which little attention had been paid, although it was frequently accompanied with dropsy. It was not complicated with hæmaturia; but the specific gravity of the urine was high, and the amount of uric acid was increased. In cases where there had not been many attacks of fever, but those with suppression of the perspiration, the diaphoretic method was a curative measure. In fatal cases, the kidney was not found atrophic; but had the appearance known as bacony. Dr. Thudichum made a communication on chylous urine. He showed a specimen which came from an English teacher resident in Germany. The case had, a year ago, been under the care of Dr. Ackermann of Rostock, and apparently recovered. But, last summer, the gentleman went to England to visit his friends; and, in consequence, as he believed, of the incidental high living, the disease had returned. The speaker then drew attention to the chemical characters of chylous urine; and showed that it was urine which contained a certain amount of serum of the blood, in which serum fatty acids were emulsified by means of phosphate of soda. The urine should, therefore, be termed liporrotic urine. Professor Mosler exhibited the heart of a calf, which was full of the bladder-worms of the *tænia medicanellata*. It is the one represented on the plates in his *Ichthyothological Contributions*. He also exhibited the killed and dissected pig which had served for the experiments in the Zoological Institute, which I have before related. The heart of this animal, also, was covered with bladder-worms. Throughout its entire body it was measly. The trichinæ with which it had been infected five months ago were found to be partially calcified. Professor Mosler also presented a man who, ten years ago, had had an apoplectic fit. The right side of his body, from the nipple to the great toe, was perfectly insensible to painful impressions—pinching, the passage of needles, burning tinder, and sudden changes from water of 110° Fahr. to water containing lumps of ice—being quite imperceptible to his feelings (analgesia and paralysis of the sense of temperature). But the sense of locality was so correct that, with tied-up eyes, the patient accurately stated the spot where he was touched slightly, and the sense of pressure so perfect that he could distinguish two from four and six dollars. All these features also existed on a piece of scalp over the left parietal bone; a circumstance of which no anatomical explanation could be given. In the limbs which were not affected by these perturbations of sensibility, motility was interfered with.

In the Botanical Section, Professor Wigand made a communication concerning the disorganisation of cells in plants. The mucus-vessels in cinnamonum and althæa, he considers to be disorganised bast-cells; the gum-resins of umbelliferous plants, he believes to be products of disease of membranes; the warts of *Betula verrucosa* (of which a remarkable specimen stands upon the banks of the Serpentine, near to the bridge), he declares to be metamorphoses of lenticellæ; the glandular masses on the *Robinia viscosa*, he also explained as originating in a metamorphosis of cells. Dr. Dippel followed, with some remarks on the origin of resin in pine-trees.

The Chemical Section opened with a communication by Dr. Remelé, on a new reaction for cobalt. Professor Carius showed the influence which the hydrate of hypochlorous acid exercises upon a large number of organic bodies. As an example of the remarkable results obtained by this chemist, I quote the sweet substance isomeric with glucose, which he obtained in this way from benzole. Dr. Volhard communicated that he had succeeded in artificially

producing creatine by heating a mixture of sarcosine and cyanamide. Professor A. W. Hofmann of London then gave a lecture on the Composition and Mode of Formation of Rosaniline, which he illustrated by the exhibition of numerous derivatives of aniline. The formation of rosaniline requires the presence of toluidine and aniline, and if no toluidine is present, aniline alone (such as the pure aniline obtained from isatine) gives no aniline-red. He then described products of substitution obtained from rosaniline; and said that they had a certain analogy to indigo, in that they formed sulpho-acids. Next, he described and showed several magnificent blue colours obtained by the interchange of toluidine and rosaniline. He concluded by saying, that it was on that day twenty-five years that in this laboratory he had begun his researches on aniline, and he was, therefore, glad to present such results. In recognition of his merits, the assembly gave the Professor a most enthusiastic salvo of applause. Our readers know that Professor Hofmann is returning to Germany, having accepted the Professorship of Chemistry at the University of Berlin, which was held by the late Professor Mitscherlich.

The Section for Zoology discussed many points in the history of the development of the eggs of insects (Forester Hartig), and of isopodes (Professor von La Valette of Bonn). Conservator Schmeltz of Hamburg requested information on several nice points; the last one being, how it would be possible to preserve the edible sea-worm of the Samoa Islands. This creature appears once a year on the coast of those islands, and is then caught and eaten in great numbers. But the Conservator has not yet succeeded in bringing an unspoiled specimen to Hamburg. He should apprise the Acclimatisation Society of this opportunity for the exercise of their taming capabilities. But one thing is certain, that the habits of the worm must be changed; it must appear at a better season than September or November, or it will be valued no higher than sprat.

On the afternoon of the 22nd, the Association adjourned to the neighbouring town of Marburg, the University of the Electorate of Hesse-Cassel. They were greeted at the railway-station by the Rector of the University with a fine speech, and then entered the town in procession, with music ahead. The streets were nicely decorated, and lined by guards of honour composed of turners. The appearance of the multitude was rather remarkable, by the presence of vast numbers of country people who had flocked to Marburg to see the sight. The peasants, the freeholders of forty acres, the conservative, imperturbable, yet intelligent basis of the population of Germany, were present in great numbers. Everywhere you could see the "blaue kittel" and "lederne schnappsack", and an intelligent, close-shaven, sun-burnt face, with prominent cheek-bones and blue eyes, under a fur cap. When the throng had entered the town, some went to see the Church of St. Elizabeth, the purest specimen of Gothic architecture extant, and now, after a lengthened restoration, a perfect building.\*

I went to the clinique of Professor Roser, now one of the most eminent teachers and practitioners of

\* Those of my readers who do not know the story of the Landgravine Elizabeth, who lived somewhere about six hundred years ago, should quickly get it for their wives and daughters. This lady was very good to the poor; but, to satisfy her piety, she robbed her husband, who was then besieged in his residence. The landgraf finding his stores disappearing, and no watch able to guard them, mounted guard himself, and caught his lady-love with an apron full of what he supposed to be sausages and loaves, but when he pulled the apron open in his wrath, it contained only a lot of crosses. The saints had backed out of her, which the landgravine had in the flutter told to her lord and master. Of course, she was sanctified for the fraud; and hence the church at Marburg.

surgery in Germany. This is a beautiful new building of red sandstone, for the reception of surgical cases only. The great feature of it is, that there are no wards containing more than four beds, and most of them contain only two. Professor Roser said that if he could help it, he would never collect more than two surgical cases in one room. Accordingly, he has a minimum of pyæmia, and great success in surgical operations. There is, at last, a practical condemnation of these dens of wound-poison, the enormous wards of general hospitals. When, at Leipsic, I saw the crowded wards, the spasmodic anxiety to effect ventilation by all manner of openings, and the shed in the yard of the hospital, where, in beds, all badly suppurating cases are kept, as if in the open air—all the horrors of pyæmia as I had seen it in military hospitals, and, in a lesser degree, in civil hospitals, abroad and in this country, came before me. I remember a conversation which I had with Professor Bardeleben of Greifswald, on the repeated use of bandages. This surgeon causes all bandages and dressings which have been once applied to open wounds to be immediately destroyed. Cheap calico serves all his purposes, and assists in preventing pyæmia. I had advocated long ago that bandages should not be used twice in the dressing of wounds or open sores; because I knew that they could not be cleaned, or, in fact, were never cleaned effectually. I came to Leipsic; and in the hospital uttered this opinion to Dr. Neumann. Almost offended, he called for the nurse in charge of the bandages. No. 1, unexceptionable; No. 2, unexceptionable. No. 3, full of yellow and otherwise coloured stains. They were packed up in silence. "We cannot get them out, sir," said the nurse. "Exactly so," said I; "that is just what I said to Dr. Neumann. You ought not, in my opinion, to be charged with the filthy and disgusting service of washing used bandages; it infects your fingers and clothes; it saves pence, and costs lives. The washed bandage is the carrier of infection, which keeps open the old and callous sore upon the leg. But the new wound—woe to him who has it! If your forceps, your lint, your charpie, impregnated with the hospital air, your infected bandage, touch it, it is death." If nurses in lying-in hospitals are obliged to wash infected clothes of any kind, or if such are used, no one need be astonished at the outbreaks of fever amongst lying-in women. They are as certain consequences of this sort of bad management, as pyæmia is of the "clean" bandages and "pure" air of general hospitals. But in Professor Roser's place, there was nothing of the kind to be objected to. True, the walls were not done in "Parian" and "non-absorbing"; but the wounds looked healthy. A boy, with the eighty-fourth tracheotomy of Professor Roser upon him, was recovering so fast that, on the second day after removal of the cannula, he could cough strongly, and show that the hole in his windpipe was permanently closed. From the clinique, we went in a body to the anatomy building. There dislocations of the elbow backwards were made and set. But the greatest lesson was the treatment of wounds of the skull with depression. With a little chisel and hammer, small fragments at the margin of the fracture were removed, and then the fragments of the inner table could be removed with the forceps with ease, and the wound cleared of every obstruction. There was a new demonstration how unnecessary and irrational that operation is which passes under the name of trephining. I have denounced it for fourteen years, with a large and successful experience in the treatment of compound fractures of the skull, particularly from gunshot wounds, by my side. If I live a little longer, I shall see Desault's idea, for he con-

ceived it first, and Stromeyer's teaching, for he gave it a living breath, victorious. In the Museum, we saw the skeleton of the giant, which is thirteen Hessian feet (or ten feet ten inches English) high. It comes from a man who was a "haiduck" of a Duke of Brunswick, and afterwards a guardsman of the "Great Elector" of Prussia. With all that height and proportionate size, the skeleton must be smaller than the man was in his prime. For it shows the evidence of wide-spread rachitis; and the neck of the thigh-bones, for example, are so far sunk and shortened as to have lost at least half an inch in longitudinal extent.

From the Anatomical Museum, the disciples of surgery and anatomy went to the top of the castle, where, in a pleasure garden, the greater part of the company had been regaling themselves and each other with coffee and beer and music. Some contemplated wistfully the bow-window in the castle, the birth-place of the Protestant reformer, Philip the Magnanimous, and now a convict-prison, where Jordan expiated the conspiracy, for which he, and Eisenmann, the doctor of Würzburg, author of many medical books—among them many a volume of *Canstatt's Jahresbericht*—and many other men, were held in imprisonment.

On the return to Giessen, I inspected a little memorial which the town of Marburg had presented to its guests. It consisted of a double piece of cardboard, handsomely embossed, with the list of the remarkable buildings and institutions on one side, and the most remarkable dates in the history of the University on the other; both insides being ornamented with photograms—the one with a representation of the Church of St. Elizabeth, the other with a portrait of Papin.\*

\* Of course, every one of my readers is acquainted with Papin's pot. It was invented towards the end of the seventeenth century, and has since passed through the world as a curiosity. Physiologists used it to boil bones in; for it will boil bones tender, and cause them to split up into concentric layers. The dentists got one of the latest advantages out of it in the shape of vulcanite, or India-rubber hardened by the prolonged influence of steam under pressure. But the era of the Papinian pot is now only beginning. It has become a household utensil in thousands of German kitchens, where it is used for boiling, stewing, and roasting, all of which it performs at a great saving of labour and fuel. In some families, I noticed two at work in the kitchen—one of copper and another of cast-iron—all large and beautifully made, and provided with as simple and efficacious a safety-valve as one can well conceive. Thus there is another great man, who lived before the time that could appreciate him, vindicated by the praises of kitchenmaids, and the magnificent flavour of boiled and stewed meats and vegetables. I looked with reverence upon the *carte de visite* of Marburg's great professor, and resolved at the earliest opportunity to introduce his pot into my own culinary establishment.

[To be continued.]

**HEALTH OF THE NAVY.** A report on the health of the navy was issued yesterday. The statistics are for the year 1861. The total force was 62,485, of whom there were sick daily 3,710; so that, of every 1,000 men of the force, 59 were sick daily, either on board ship or in hospital. The total number of cases from disease or injury was 91,276, being in the ratio of 1460·7 to the 1,000, or nearly three entries on the sick list to every two men of the force. Each case was, on an average, fourteen days under treatment, which gives a mean of about twenty-one days' sickness to each man of the force. There were daily sick on the several stations, per 1,000 men: Home, 48·1, of whom 9·6 died; Mediterranean, sick 61·8, died 10·4; North America and West Indies, sick 60·4, died 42·1; Brazils, sick 43·4, died 16·1; Pacific, sick 58·9, died 7·9; West Coast of Africa, sick 62, died 34·1; Cape of Good Hope, sick 76·7, died 18·1; East Indies and China, sick 86·7, died 26·1; Australia, sick 40, died 13·7; and the Irregular Force, sick 77·4, died 10·4.



## Special Correspondence.

### EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

EDINBURGH, which for three months had presented no more interesting events of a professional nature than one of our small provincial towns would have done, is now all astir again. Of late there has been no lack of work; for we have been holding meetings, forming an University Club, opening a College Hall, listening to a new professor, seeing Mr. Syme operate, visiting our medical societies, hearing debates in our police-court on the diseased meat question;—in short, matters have so changed, that whereas, a month ago, your Edinburgh correspondent would have felt how difficult it was to get enough news for a very short communication, he now feels that he will have no little difficulty in compressing all that he has to say in the space allotted to him.

The General Council of the University meets twice in the year—in March and October. The last meeting for this year occurred on the 31st of last month, and was attended by a large number of its members. The General Council is a body composed of the graduates and professors of the University, and of those students who, at the time of the passing of the University Act, had completed a four years' curriculum. Its functions are ill defined. Its power is limited to the election of one of its number to represent the Council in the "University Court", which is the court of appeal in all university matters. Its function appears to consist very much in drawing the attention of the *Senatus Academicus* and of the University Court to changes which appear desirable in the University. But, as advisers who are not powerful are rarely listened to, the representations of the Council appear to be treated by the higher university authorities with a certain amount of contempt. The General Council has been representing to the University Court the propriety of causing the University accounts to be submitted to them; but the Court has thought fit to refuse their sanction to this proposal, without even giving a reason for so doing. The debate at last meeting was marked by a few speeches which proved that some of the leading members of Council felt not a little aggrieved at the summary manner in which they had been treated; and their displeasure was by no means allayed when Professor Christison informed them that the General Council of the University would see the accounts at the time when they would be placed before the public—i.e., early next year; and that he could not see what claims the Council possessed over the public in being informed on such matters. The general feeling on this matter is, that although some members of the Council may have been imprudent in attempting to raise an *animus* between the *Senatus* and University Court on the one hand, and the General Council on the other, yet the correct policy of the former bodies undoubtedly consists in conciliating the body of gra-

duates, and treating with deference the suggestions of a highly educated section of the community, whose strongest feeling in these matters is an interest in the welfare of *Alma Mater*.

On the 2nd of November, the classes of the University were opened. On that day, Mr. Spence, the newly elected professor of surgery, delivered before a crowded audience, which comprised a large number of the medical men of Edinburgh, his inaugural address. Mr. Spence chose as the subject of his address a review of the Edinburgh school of surgery; and his treatment of the subject elicited the approval and applause of the audience.

The introductory address of the Principal of the University, which has hitherto been delivered on the first day of the session, was this year postponed until Monday, the 15th ult., with a view of preventing, if possible, a repetition of the very disgraceful conduct which, annually repeated, has rendered the ceremony quite notorious in Edinburgh. Some of the professors, who believed that the chief actors in the disturbances on former occasions had been persons not comprised in the body of students, suggested that no one should this year be admitted to the lecture who could not prove by showing a ticket that he was a matriculated student; and the lecture was therefore postponed, so as to give time for all students to matriculate. The result has, however, been far from satisfactory, as the foolish disturbances have this year been rather worse than usual. The learned Principal chose, as the subject for his address, the better endowment of the Universities of Scotland; and the claims of science, literature, and the arts to national recognition and support, not only as taught in these Universities, but as advanced by the discoveries and inventions of their professors and students. We heartily regret that the great interest of the subject, and the admirable manner in which it was treated, failed in securing a patient hearing for one, whose high reputation as a man of science and of letters should in a special degree command the admiration and respect of all who are *alumni* of the University of which he is so bright an ornament.

The formation of an University Club in Edinburgh is in many respects the most remarkable event which I have to narrate. This institution is to be organised according to the plan of our best clubs, and is instituted "for the association of gentlemen connected with the Universities of the United Kingdom, or with foreign Universities." It is to be composed of 500 members, who are to pay an entrance-fee of twenty guineas, and an annual subscription of five guineas. The number which had already joined when the first list appeared, in October, amounted to 335 members; and since that time many have been elected. The Club has, I believe, already secured two large houses in Princes Street; and building operations are to be set on foot immediately.

I have alluded to the opening of a College Hall in Edinburgh. Some persons have long thought that it would be advisable to offer students the opportunity of living in a collegiate institution, where, besides

being constantly in the company of one another, they would enjoy the opportunities of tuition. Several professors and others have formed a College Hall Company; and, as a preliminary step, they have secured a house, which is to be presided over by a warden, and is, *pro tempore*, to serve the purposes of the intended College Hall. I can tell you nothing of the success of the institution; but, from the fact that I have never heard its name mentioned by a single student, I should very much question whether students fully appreciate the advantages which it is supposed to offer them.

On the 2nd inst., Mr. Syme removed the whole of the lower jaw of a man for a tumour implicating its whole substance. In spite of the admirable manner in which the operation was performed, the patient sank a few hours after its completion.

## Association Intelligence.

### BRANCH MEETINGS TO BE HELD.

| NAME OF BRANCH.                  | PLACE OF MEETING.         | DATE.                          |
|----------------------------------|---------------------------|--------------------------------|
| SHROPSHIRE ETHICAL.<br>[Annual.] | Lea Hotel,<br>Shrewsbury. | Mon., Nov. 28,<br>2.30 P.M.    |
| BATH AND BRISTOL.<br>[Ordinary.] | York House,<br>Bath.      | Thursday,<br>Dec. 1, 7.15 P.M. |

## Correspondence.

### POOR-LAW MEDICAL RELIEF.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your finding space for the following reply of the Poor-law Board to the letter you did me the favour to insert in your JOURNAL of the 12th instant. You will perceive that the Board are not desirous to afford us any assistance. My medical friends must, therefore, individually see their own members, and endeavour to obtain from them a promise to support a bill founded on justice. In the course of a short time, I will lay a copy of the proposed Bill before the profession, and elicit from them their opinions on it. I am, etc.,

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, Nov. 21st, 1864.

*The Secretary of the Poor-law Board to Mr. Griffin.*

Poor-law Board, Whitehall, Nov. 10th, 1864.

SIR,—I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 5th inst., enclosing an extract from a newspaper report of the proceedings at a meeting of the Guardians of the Southampton Incorporation relative to the providing of medicines for the Poor.

The Board direct me to express their thanks for your communication. As regards the last paragraph, however, they desire me to state that they will not trouble you to send them a copy of the proposed Bill to which you refer. They will be prepared to consider any Bill upon the subject of the Poor-law Medical Relief which may be introduced into Parliament by any member of the legislature, and to give it due attention. I am, sir, your obedient servant,

C. GILPIN, Secretary.

Richard Griffin, Esq.

### ASSISTANT-SURGEONS FOR INDIA.

SIR,—In the last number of the JOURNAL, there is an advertisement from the India Office for assistant-surgeons in H. M.'s Indian medical service; and I was much surprised to find there was no editorial comment upon this strange procedure of his Majesty of India. You surely do not forget the late attempt to pass a bill through Parliament at the last moment to enable the autocrat of India to get recruits for the Indian medical service, and how very properly it was rejected.

Now, sir, here is an attempt to do what Parliament in its wisdom refused to sanction; but, as you see, the great man, who governs India from Westminster, would not submit to the dictum of Parliament. It, therefore, rests with the press to expose this proceeding, and point out to young medical men the danger of being entrapped by such advertisements. Sir C. Wood has no more power to promise retiring allowance than I have.

The commission of the last assistant-surgeon appointed to Madras under the old competitive system bears date the 25th January 1860; and since then there has been no act of Parliament enabling the Indian Secretary to nominate for the Indian medical service. Hence his fruitless attempt at the close of last session. I warn medical men not to be seduced to enter a service now worthless, and without any guarantee for the future. The British service, bad as it is, is far preferable in every way. I give my advice after a service of twenty years in India, now enjoying the handsome pension of ten shillings and sixpence a day!

So, I say again, beware, young men; tell Sir C. Wood you will have none of it. Take my advice; stay at home, and thus avoid the snubs of your so-called superiors (I say, your inferiors). Bread and cheese here is better than what you will get in India; but if you are for the red flag, wear it in a recognised service, which the Indian is not now.

A RETIRED SURGEON-MAJOR, MADRAS ARMY.

November 19th, 1864.

### TREATMENT OF PARTURIENT WOMEN.

LETTER FROM WILLIAM LEGGE, ESQ.

SIR,—I fear I have already occupied too much space in our JOURNAL; but I must beg a corner to reply to Mr. Pope's criticisms.

Mr. Pope joins issue with me on the question, Is pregnancy a disease? I reply: No, but a natural physiological process. He says, Yes, and forthwith classes it with *zymotic* diseases! adding, that it is "the primeval disease inflicted by the Almighty on Eve;" and quoting (apparently in support of this assertion) the words, "I will greatly multiply thy sorrow," etc. But a moment's consideration will show that, just as the elements of decay existed in the human organism before the fall, and the curse consisted in calling them into activity, so the sorrow here spoken of was not a new feature in the process of child-bearing, but the curse lay in *multiplying* that sorrow. Even granting Mr. Pope's view correct, he can scarcely contend that pain and sorrow constitute disease. The question at issue, however, will, I think, be best decided by first attempting to attach a distinct meaning to the term disease; and, although it is not easy to define precisely a general term, it will suffice for our purpose to say that disease embraces every serious and permanent derangement of the system, such as fevers, inflammatory affections, and their sequelae. It differs widely from a simple disorder, such as scabies; or a *malady*, such as club-



foot. So far, indeed, as the term *malady* refers to a state of suffering, it may embrace parturition; but no one will deny that there may be many *maladies* where there is no disease. If, then, parturition be a disease, so must micturition and defæcation be diseases also.

Let me assure Mr. Pope that he is as mistaken in thinking any innuendoes conveyed by my remarks, as he is in representing me an advocate of stimulant diet. Probably my last letter escaped his notice, or he would have perceived that I recommend the diet to be sufficiently substantial, *without* being stimulant.

I believe the discussion of this subject will be productive of good results; and I am sanguine that Mr. Pope's "phalanx of veterans" will have their ranks thinned under a vigorous charge directed by such leaders as Drs. Oldham, Graily Hewitt, and Skinner.

I am, etc., WILLIAM LEGGE.

Wiveliscombe, November 14th, 1864.

#### LETTER FROM G. R. D. MACCARTHY, ESQ.

SIR,—It is pleasing to see the treatment of parturient women has been so far discussed by the letters you have lately published, that I should think we might be pretty well agreed as to the propriety of a cautious middle course, adapted to the constitution and circumstances of the case.

There are various conditions of the animal frame which are not disease, but yet are deviations from the normal standard, and yet such as to require medical treatment and an alteration of diet. Constipation, for instance, to a certain degree, and a certain congested state of the vessels, and the occasional headaches which many persons are troubled with, cannot be denominated disease, but yet require purgative and other means for their relief; so also, an exhausted state of the system, from great exertion, indicates the propriety of rest, and even of stimulus. So that I cannot see that, because parturition is a natural and physiological process, it follows we are to leave the subject of it to herself; especially, as we know what serious deviations from health are often consequent on it, even with the best management. And how much more danger might be apprehended where no care is taken.

One of your correspondents in your last JOURNAL has, if I may so express it, shunted off from the direct line into a branch of the subject, and got on the ergot question. In No. 3 of his conclusions, he says, "If flooding, hour-glass contraction, or contraction of the os uteri, etc., is to be avoided, ergot of rye should not be given"; and then, in the fourth place, he says, "If it be necessary to give ergot, the best preparation is the tea," etc. I do not exactly understand him; for those alarming occurrences, he has stated, are always to be guarded against, and are not easy to be foreseen; so that, if so, ergot should never be given. With respect to flooding, I have always considered its use in labour as preventive of after-hæmorrhage, by causing an earlier contraction of the uterus and expulsion of the placenta.

As I trust we are discussing these matters with the most perfect candour and friendly feeling, I will venture to state what I have observed of the effects of this extraordinary specific.

1. As Dr. Whitmarsh has stated, I have found the best manner of giving it is as tea; boiling it first (a drachm and a half in a teacupful of water) for a few minutes, and then letting it stand and infuse for a quarter of an hour. This to be given in about three doses, once every fifteen or twenty minutes. Often the first is sufficient.

2. That it ought never to be used where there is a

narrow pelvis, and where the mechanical impediment is very difficult to overcome, as in case of impaction of the head; or where the os uteri is not quite dilated, or very soft and dilatable; and never in first labours, unless the head is pretty well descended into the pelvis, and the pains have become weak.

3. That its use, therefore, seems to be, as Dr. Whitmarsh has stated, to arouse, and, I may add, assist, the uterine contractions; and here it is, no question, of amazing benefit. For I can see no use in waiting an indefinite time, probably for hours—prolonging the state of anxiety on the part of the patient and her friends—when we know we have in our power a well tested agent which would, in all probability, bring her sufferings to a close in half an hour or less, just merely from a complaisance to nature.

For what is nature but a personification of those laws and modes of action which the Deity has ordained? We should remember, He has constituted us intelligent beings; and what are all the many inventions and combinations of mechanical and chemical powers, but a guiding, directing, and increasing those powers, so as to produce effects which could not be gained but by the use of our intelligence? So that art, which is too often decried, as if it were contrary to, or an interference with, nature, is, in fact, the result of the mental faculties with which God has endowed us; and which are, in truth, nature in its most perfect state of development.

If any one were fallen, and injured and stunned thereby, yet, after a while, such a one might be able to rise by the unassisted efforts of nature; but would it not be both kind and helpful to lend a hand, especially if it were a female?

"*Opiferaque per orbem dicor*" is the physician's motto; which would not be applicable if we were only to gaze on nature's operations; and, instead of viewing and dealing with her as an efficient handmaid, exalt her to the dignity of a goddess.

The same gentleman I have already alluded to, mentions the comparatively small percentage of bad cases amongst the patients of skilled midwives. It has not been my good fortune to meet with many of them; and where there is little skill and little humility, there is, I fear, much officiousness, assurance, and obstinacy.

Begging pardon for the length of my observations,  
I am, etc., G. R. D. MACCARTHY.

SIR,—I feel deeply interested in the discussion of the treatment of parturient women; and, if you will allow me a small corner in your valuable JOURNAL, I will tell you how I treat; and, I may say, with universal success, as I never see a case of puerperal fever or any other of the dreaded sequelæ of parturition.

I always begin with a light nourishing diet, such as arrow-root, gruel, sago, and the like. On the morning of third day, I never omit giving an aperient of castor-oil. After its action, I order chicken- or mutton-broth; and then, day by day, gradually increase the quality of the food, till we get to the mutton chop, roast beef, etc.

I may say that this treatment is followed by the best results; and as far as actual practice goes, I may add, that I attend in a year quite an average number of labours.

I am, etc.,

"YOUR FAITHFUL ASSOCIATE."

Nov. 16th, 1864.

THE PHILADELPHIA MEDICAL REPORTER contains an account of a case of external iliac aneurism cured by pressure applied in a novel way by Dr. Moffat, at Staten Island.

## Medical News.

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.** The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 16th.

Dr. Tooke, Robert Farrar, Leigh, Lancashire  
Corbin, Thomas Wilson, L.S.A., Hornsey  
Crangie, John, Hackney  
Draw-on, Henry, L.S.A., Church Road, Islington  
Dwyer, John Cornelius, Woolwich  
Haslewood, Albert Octavius, Darlington  
Hatherly, Henry Reginald, Derby  
Jones, Robert Arthur, Carnarvon  
Lynch, Jordan Roche, Notting Hill  
McMillan, Samuel Scott, Bolton, Lancashire  
Olliphant, John, M.D. Edin. and L.R.C.P. Lond., Edinburgh  
Pogson, William, Searcroft, near Leeds  
Quinn, John Hogan, Dublin  
Rigg, Thomas, M.D. Edin., Carlisle  
Rigden, George William, Canterbury  
Roberts, Edward Coldridge, Exeter  
Scott, Robert John, C.M. Aberd. and L.S.A., Omagh  
Snow, William Vicary, Barnstable  
Wilford, John George Frederick, Brompton, Yorkshire

**Admitted on November 17th—**

Compton, Thomas Armatridge, B.A. Cantab., Christchurch  
Dalton, Thomas, M.D. Edin., Wigton, Cumberland  
Forster, Edward Wood, Newcastle-on-Tyne  
Glyn, Thomas Robinson, Liverpool  
Grosvenor, Alfred Octavius, Alsager, Cheshire  
Harvey, Walter Anstice, South Petherton  
Heaven, Charles Thomas, London  
Horn, Tudor, Westbourne Terrace  
Jones, James, Kingston-on-Thames  
Leacock, Charles George, Puckeridge, Herts  
Moseley, Edward, Birmingham  
Marshall, Francis John, L.S.A., Moulton, Northamptonshire  
Massey, George, Dublin  
O'Leary, Edmund, Tipperary  
Ryder, Henry Thomas, L.S.A., Devonport  
Snowdon, John Pringle, Newcastle  
Spencer, Lionel Dixon, M.D. St. Andrews, Newcastle  
Taylor, Herbert, M.D. Edin., Rutland Street  
Willson, Henry, Strand  
Woodford, Edward Russell, Ventnor, Isle of Wight

**Admitted on November 18th—**

Anstey, Arthur Newland, Adelaide, Australia  
Cole, Richard Beverly, M.D. Philad., San Francisco  
Duke, Oliver Thomas, Kennington  
McLellan, John Monckhead, Murrayside, Stirlingshire  
Manley, John, L.S.A., West Bromwich  
Ray, William, West Square, Southwark  
Rogers, William Moon, Mauritius

**At the same meeting of the Court—**

Strickland, Charles, H.M.S. *Supply*, Woolwich, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date December 5th, 1855.

**APOTHECARIES' HALL.** On November 17th, the following Licentiates were admitted:—

Brewster, Edward, Grantham  
Child, Edwin, Richmond, Surrey  
Haxworth, Walter, Barnsley, Yorkshire  
Müller, Augustus Christian, St. Mary's Terrace  
Smith, George, Kentish Town  
Smith, Henry Richard, Newark  
Tomlinson, D. Webster, St. Mary's Hospital

**At the same Court, the following passed the first examination:—**

Godman, J. Stephen, Western General Dispensary, Marybone

### APPOINTMENTS.

MOIR, R., M.D., appointed Superintendent of the Central Prison at Agra.

\*WINTERBOTHAM, W. L., M.B. Lond., appointed Certifying Surgeon under the Factories' Act, for Bridgwater and neighbourhood.

### ARMY.

BALL, Staff-Assistant-Surgeon J. J., M.D., to be Assistant-Surgeon 33rd Foot, *vice* T. Quinlan.

BARKER, Staff-Assistant-Surgeon J. E., M.B., to be Assistant-Surgeon 103rd Foot, *vice* R. Hall, M.D.

CLARK, Assistant-Surgeon T., 38th Foot, to be Staff-Surgeon, *vice* J. Peacock.

DAVYS, Surgeon J., 35th Foot, to be Staff-Surgeon, *vice* W. S. Whylock, M.D.

HALL, Assistant-Surgeon R., M.D., 103rd Foot, to be Assistant-Surgeon 33rd Foot, *vice* T. Clark.

LESLIE, Assistant-Surgeon W. H., M.D., 48th Foot, to be Assistant-Surgeon Royal Artillery, *vice* T. Maunsell.

QUINLAN, Assistant-Surgeon T., 33rd Foot, to be Staff-Assistant-Surgeon, *vice* J. J. Ball, M.D.

WHYLOCK, Staff-Surgeon W. S., M.D., to be Surgeon 38th Foot, *vice* J. Davys.

### ROYAL NAVY.

ALLEN, John, Esq., Acting Assistant-Surgeon, to the *Magicienne*.  
CARMICHAEL, William, M.D., Assistant-Surgeon (additional), to the *Cumberland*.

DALTON, William R., Esq., Staff-Surgeon, to the *Royal Adelaide*.

DOMVILLE, H. J., M.D., to be Deputy Inspector-General of Hospitals and Fleets.

DUNWOODIE, J., Esq., to be Surgeon in Her Majesty's Fleet.

IRELAND, Arthur J., M.D., Assistant-Surgeon, to the *Royal George*.

JOHNSON, Arthur B., Esq., Assistant-Surgeon, to the *Implacable*.

LAMBERT, John, Esq., Assistant-Surgeon, to the *Espoir*.

LEES, Charles A., Esq., Assistant-Surgeon, to Malta Hospital.

MEIKLEJOHN, J. W. S., M.D., to be Surgeon in Her Majesty's Fleet.

NIHILL, John, M.D., Surgeon (additional), to the *Duncan*, for service at Bermuda Hospital.

**VOLUNTEERS.** (A.V. = Artillery Volunteers; R.V. = Rifle Volunteers):—

SCARR, R. T., Esq., to be Assistant-Surgeon 1st Hertfordshire Light Horse Volunteers.

WILLIAMS, J., Esq., to be Assistant-Surgeon 1st Administrative Battalion Cornwall R.V.

### BIRTH.

DAVIS. On November 1st, at St. George's, Wellington, Salop, the wife of \*W. Davis, Esq., of a son.

**VACANCY.** The office of surgeon-superintendent of Portsmouth Convict Prison has become vacant by the death of Dr. J. W. Bowler.

**A YOUNG MOTHER.** In Sheffield was lately registered the birth of a child, whose mother was only 13 years and 10 months old.

DR. ARNETH, the author of a treatise on the state of *Midwifery and Gynaecology in France, Great Britain and Ireland*, has been appointed physician in ordinary to the Grand Duchess Helena of Russia.

**BENZINE AS AN INSECTICIDE.** A mixture of ten parts benzine, five parts soap, and eighty-five water, has been very successfully used by Gille to destroy the parasites which infest dogs.

DR. COHN. Dr. B. Cohn, the author of a treatise on *Embolie Diseases of the Blood-vessels*, for some years a private teacher (privat-docent, or aspirant to a professorship) at the University of Breslau, died a short time ago at Berlin. The loss of this promising author and physician is much regretted in scientific circles.

**FRENCH INQUIRY INTO GERMAN MEDICAL MATTERS.** Professor Le Fort of Paris has been deputed by the French government to investigate specially and in detail the plans of the Prussian University studies, and the arrangements of the clinics and hospitals in which medicine and surgery are taught.

**THE HUFELAND SOCIETY OF BERLIN.** The competitive essays demanded by the Hufeland Society of Berlin were to be on "Hypodermic Injections." Two essays were offered, and the author of the best and successful one was Dr. Albert Eulenberg, Assistant-Physician of the Klinik at Greifswald.

**MEMORIAL OF THE LATE PRESIDENT OF THE COLLEGE OF PHYSICIANS OF IRELAND.** We understand that a movement has been inaugurated by a number of the Fellows and Licentiates of the Royal College of Physicians for the execution of a bust of Dr. Corrigan, late president of the college. The execution of the bust has been confided to Mr. Foley of London. The college have also voted a full-sized portrait to be executed by Mr. Catterson Smith and placed in their College Hall. (*Dublin Medical Press*.)



**FECUNDITY.** Mr. Jackson, of Wimpole Street, records the following remarkable instance of female fecundity. A lady, 30 years of age, married in 1859, and her first child was born two years afterwards. In May 1862, she had twins, and in July of the following year a triplet. On the 2nd of the present month, she again had twins, making a total of eight children all born alive, and the last seven of which were born within two years and a half.

**FINES FOR A NEGLECT OF VACCINATION.** At the Wandsworth Police Court on Monday last, two women were fined 5s. each and costs for neglecting to have their children vaccinated. In one case the defendant had refused to allow her children to be vaccinated, and had said, "If it is God's will they should have the small-pox, they will have it." The consequences had been most lamentable. Three children had died from small-pox. There were five children in the family unvaccinated.

**HORSE GUARDS GRAMMAR.** Mr. Thomas Hughes, author of *Tom Brown*, has been appointed "Reviser of Military Regulations," with a thousand *per annum*. No wonder the Duke of Cambridge has such a dislike to competitive examinations and to having in the army men who are capable of writing English. The war authority itself, it appears, is obliged to have a literary gentleman to peruse its documents before they are issued.

**TESTIMONIAL TO MR. J. WATKINS, F.R.C.S.** Mr. Watkins was last week entertained at dinner by a large party of gentlemen, most of whom had been his patients, and presented with his own bust in marble. The bust, which has been executed by Mr. W. Davis, and is a most faithful likeness, was uncovered at the end of the chairman's speech. The inscription is, "Johanni Watkins, sanatori, grati sanati;" and, in English, "The Healed to the Healer."

**EPIDEMIC DISEASE AT WOOLWICH.** At a meeting of the Woolwich Local Board of Health, Mr. Ruegg said that the Registrar-General's report proved that the mortality at Woolwich now far exceeded that at the period when cholera raged in 1854. The prevailing epidemic, typhus fever, had struck down the wealthy and the cleanly even more than the poor and those who were compelled to reside in crowded habitations. Woolwich was naturally a healthy town, twice as healthy as London, but now the rate of mortality was considerably greater. After consideration, and obtaining all the information he could, he was convinced that this state of things arose from the discharge of the metropolitan sewage into the Thames at the outfall works near Barking Creek, or from defective trapping of the local sewers. At all events, a searching investigation was required. Mr. Rixon, registrar for the district, said there was no disguising the fact that mortality was greatly increasing in the town. After considerable discussion, Mr. Ruegg's motion was adopted, and a committee appointed.

**ILLEGAL ASSUMPTION OF TITLE.** George Fentiman, a chemist and druggist, was lately charged at the Thames Police Court, with wilfully and falsely taking and using the name and title of surgeon, he not being registered under the Act 21st and 22nd of Victoria, cap. 90, sec. 40. Mr. Moss, a solicitor, conducted the prosecution for Mr. John Wills, a regularly qualified and registered medical practitioner, of Upper East Smithfield. The defendant carries on business in the same street. The case against him was proved several weeks since, and was ordered by the magistrate to stand over. It was now admitted that the defendant had since the formal conviction by the magistrate omitted the word "surgeon" from his bills and advertisements, and also erased the word from the front of

his house. Mr. Moss said his client, Mr. Wills, had been put to considerable annoyance and expense by the conduct of the defendant. No one could or would take up these cases except a medical man, although the best interests and well-being of society were concerned in carrying out the law. The complainant did not expect to recover all the expenses he had incurred in the prosecution, but some costs ought to be allowed. Mr. Paget said the law had been properly vindicated, and that was enough. If he found the offence repeated by the defendant, he should inflict the full penalty. At present he should impose a nominal fine of 1s., and 2s. costs. [It is certainly hard that the expenses of this prosecution should fall upon Mr. Wills. What is the use of a Medical Council if it does not take care that the Medical Act is carried out. Mr. Wills has done something. The Medical Council talks and spends money. EDITOR.]

**DINNER TO JOHN LAVIES, ESQ.** On Wednesday last, November 23rd, a dinner was given at the Freemasons' Hall to Mr. Lavies, late Treasurer of the Medical Registration Association. The chair was occupied by Mr. Fergusson, F.R.S.; and there were about sixty gentlemen present, among whom were Dr. Copland, Mr. Erichsen, Mr. Hancock, Dr. G. Webster, Mr. Lord, Mr. Ansell, Mr. Tidd Pratt, Mr. Lush, Q.C., etc. Letters expressive of regret at not being able to attend were received from various members of the profession, several of whom at the same time forwarded contributions to the testimonial for Mr. Lavies. The Chairman, in proposing the health of their guest, Mr. Lavies, referred to the progress of the Medical Registration Association, and to the difficulties with which it had had to contend in consequence of the uncertainty of the Medical Act. He hoped that, though the Association was at present in abeyance, it would revive. Mr. Lavies, in acting as Treasurer and for some time as President, had spared no labour, and had not hesitated to spend his own money in behalf of the Association. Mr. Lavies, in reply, expressed his thanks for the kindly recognition shown to him by his professional brethren.

**POISONING BY TOBACCO JUICE.** A young man, named Richard Edmondson, a cotton piecer at Messrs. Garnett and Horsfall's, Low Moor, near Clitheroe, died lately somewhat suddenly, with all the symptoms of having been poisoned. His pulse was quick and feeble; his eyes dilated and insensible to light; the heart was perfectly paralysed; his muscles rigid; and he was unable to swallow. This was his condition before death. The coroner ordered a *post mortem* examination of the body to be made by Dr. Scott of Clitheroe. He found the vessels of the brain swollen and filled with black blood, together with extravasation of blood in the ventricles of the brain. "These appearances" (he deposed) "led me to conclude that the deceased had taken some narcotic poison, as we find them in persons having taken opium. I attribute the appearance of the blood-vessels on the brain to narcotic poison. The deceased was very much emaciated. After hearing all the evidence, I attribute the cause of his death to the chewing of Limerick roll tobacco, and his having swallowed the juice. It is a kind of poison that acts on the brain, and is an irritant and compound poison. It is not used in medicine now. I should not like to give a person thirty grains of the unprepared tobacco. Tobacco gains power according to the way in which it is manufactured; and the Limerick roll is exceedingly strong tobacco." The coroner summed up; and the jury returned a verdict, "That the deceased died from the effect of having chewed Limerick roll tobacco and swallowing the juice thereof, which has acted upon the stomach as a narcotic poison."

**SAMARITAN HOSPITAL.** Two consulting physicians have been appointed to this hospital—Dr. Jenner and Dr. Greenhalgh. It appears to be a wise arrangement to have selected one physician, at least, for the consulting office, who is not a specialist; while one physician-accoucheur must doubtless prove advantageous to the institution.

**THE PHARMACEUTICAL SOCIETY.** A deputation of the Council of the Pharmaceutical Society of Great Britain, consisting of Mr. Sandford (president), Mr. Hills (vice-president), Mr. Hanbury (treasurer), Mr. Squire, Mr. Morson, Mr. Waugh, Mr. Orridge, Dr. Edwards, Mr. Flux (solicitor), and Mr. Bremridge (secretary), have had an interview with the Right Hon. Sir George Grey at the Home Office on the subject of a proposed bill for regulating the qualifications of chemists and druggists.

**THE LATE MR. W. J. WICKHAM.** During the past week, by permission of the Dean and Chapter, a handsome memorial tablet has been placed within the Cathedral to the memory of the late William John Wickham, Esq., at the cost of many friends, who are unwilling that his eminent services as a medical man, and his many unostentatious acts of kindness should pass away, without some tribute of their love and regard. The following is the inscription:—"In memory of William John Wickham, Esq., F.R.C.S., forty years Surgeon to the Hants County Hospital. He died January 19th, 1864, aged 66 years. Erected by many friends, who deeply lament his loss." In gold letters above the head are the following words. "In a loving and Christian spirit he healed the sick, and comforted the afflicted."

**ILLEGALLY KEEPING LUNATICS.** At the Central Criminal Court, this week, Sophia Leander surrendered to receive judgment. She was convicted a few sessions back of keeping a house for the reception of lunatics without being duly licensed, but sentence was respited to give the defendant an opportunity of removing the patients from her establishment and complying with the law. Mr. Giffard now informed the court that the defendant still kept on the establishment, and appeared determined to put herself in opposition to the law. She had a number of patients under her charge now. After some discussion, Baron Bramwell said the defendant seemed to have an opinion that she was not infringing the law. He thought that judgment need not be passed, but that having been admonished, she would be allowed to have her recognisances enlarged, to be brought up again for judgment. The defendant was then discharged. Henry Wilkins appeared upon his recognisance to answer a similar charge, and was fined £50.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

**MONDAY.** Medical Society of London, 8 P.M.

**THURSDAY.** Harveian Society of London, 8 P.M. Dr. Grady Hewitt, "On the Indications of the Uterus and their Treatment."—Lancaster.—Chemical.

**FRIDAY.** Western Medical and Surgical Society, 8 P.M. Mr. B. E. Brodhurst, "On Bony Anchylosis."

**COMMUNICATIONS** have been received from:—Mr. J. Vose, St. Leon; Mr. T. M. Stone; Dr. Thudichum; The Honorary Secretaries of the Western Medical and Surgical Society of London; Dr. Chequer-Butty; Dr. C. H. F. Roth; Mr. John H. Gibson; Mr. Clarke; Mr. G. D. R. McCarthy; Mr. Richard Griffin; Dr. Fitzpatrick; Dr. J. H. Balfour; Mr. Augustin Prichard; Mr. J. Hoog; Mr. W. L. Winterbottom; Mr. W. Davis; Dr. R. Fowler; Mr. J. B. Curgeny; Dr. William Newman; Dr. Kiggell; and Mr. A. Ransome.

## OPERATION DAYS AT THE HOSPITALS.

**MONDAY.**.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

**TUESDAY.**....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.

**WEDNESDAY.**...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.

**THURSDAY.**....St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

**FRIDAY.**.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

**SATURDAY.**....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

## TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL, to be addressed to the Editor, 37, Great Queen St., Lincoln's Inn Fields, W.C.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

S. A.—Mr. Carter had no more to do with throwing open the Provident Fund to the whole profession than had any one of the Directors who voted for the proposal.

**ACTING ASSISTANT-SURGEONS.**—T. P.—We believe it is quite true that at all events one of this new class of newly-appointed army surgeons has been dismissed the service for drunkenness. We have even heard of one of the "waifs and strays" being found in a beastly and helpless state of intoxication.

**TAPPING THE BLADDER.**—SIR: Your paragraph, giving M. Velpeau's opinion about tapping the bladder, is not likely to have much weight; as in it, the learned professor assumes that in each operation—viz., in puncturing above the pubis, and in tapping through the rectum—the peritoneal cavity is opened.

We cannot but be surprised that a surgeon with such extended experience should make a mistake of this kind.

It did not appear right to let the error pass without some remark.

I am, etc., AUGUSTIN PRICHARD,

Surgeon to the Bristol Royal Infirmary.

Clifton, November 21st, 1864.

**THE GRIFFIN TESTIMONIAL FUND.**—SIR: The following subscriptions have been further received on behalf of the above Fund:—J. E. Moreton, Esq. (Great Boughton), 10s. 6d.; Dr. T. P. Parker (Sunderland), 10s. 6d.; Wm. Kimbell, Esq. (Solihull), 5s. Amount previously announced, £102:1:6. Received at the *Lancet* office, £6:14.

I am, etc., ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, November 23rd, 1864.

## ADVERTISEMENTS.

## University of London.—Notice

IS HEREBY GIVEN, That the next Half-yearly Examination for MATRICULATION in this University will commence on MONDAY the 4th of January 1865. In addition to the Metropolitan Examination, a Provincial Examination will be held in the Town Hall of LEIPS.

Every Candidate is required to transmit his Certificate of Age to the Registrar, Burlington House, London, W., at least fourteen days before the commencement of the Examination.

Candidates who pass the Matriculation Examination are entitled to proceed to the Degrees conferred by the University in Arts, Science, and Medicine; and are exempt (1) from the Entrance Examination otherwise imposed on Candidates for admission to the Royal Military College at Sandhurst; (2) from those Examinations which every Medical Student now commencing his professional studies is required to have passed some one; (3) from the Preliminary Examination otherwise imposed by the College of Surgeons on Candidates for its Fellowship; and (4) from those Examinations in which it is necessary for every person entering upon Articles of Clerkship to an Attorney to have passed some one,—such as Matriculation in the First Division being entitled to the additional exemption from one year's Service.

WILLIAM B. CARPENTER, M.D.,  
November 17, 1864. Registrar.



# Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### BIRMINGHAM GENERAL HOSPITAL.

#### CASE OF HYSTERIC APHONIA.

Under the care of JAMES RUSSELL, M.D.

THE following case affords me an opportunity of completing, by a characteristic instance, the illustrations of loss of speech from causes seated in the nervous system, which I have laid before the readers of the JOURNAL. In my first paper on this subject, the cause of the speechlessness was of an organic nature, directly affecting the integrity of the cerebral tissues; in a second paper, I described some cases in which the origin of the disorder appeared to be connected with an abnormal condition of certain of the smaller blood-vessels of the brain, induced by the epileptic paroxysm, and lowering the nutrition of the ganglion-cells. In the present instance, the disease was purely functional; it depended entirely upon abnormal suspension of that effort of volition which is the appropriate stimulus to the muscles of articulation, as well as to those of the limbs and trunk.

In the *Medical Times and Gazette*, September 3rd, a very similar case is narrated, and some very judicious remarks upon the case by Dr. Wilks are appended. These remarks tend to enforce the truth of the fundamental principle both in the pathology and in the treatment of all hysterical affections, that they are "mental or moral ailments, requiring moral treatment"; and that "the method of cure was to rouse the will, and thus rid the body of its thousand morbid feelings".

It is not easy to realise fully the extent to which voluntary effort is suspended in cases of hysteria, and especially in such cases as the one to be detailed, in which we see the normal stimulus of volition supplied to all the muscles of the body excepting one single group, from which it is withheld. It needs experience to convince us that an effort which, under normal conditions, is made without our recognising the act, should, under certain unhealthy states, be matter of extreme difficulty; even as formidable as it would be to ourselves, were we aware that some painful or unpleasant consequence must be the immediate result. Yet it is indisputable that this fact is of fundamental importance in conducting the treatment of the disease. Unless the patient be induced to make the needful effort at an early period of her malady, the difficulty of making it increases with the delay; the will becomes more and more enfeebled by indulgence of the disinclination to rouse it into action; and precisely on this account the effort is less and less likely to be made. But at the same time the nutrition of the muscles, and of the nervous centres at the seat of volition, is suffering in exact proportion as the indisposition to functional activity is indulged; and thus, whilst a constantly increasing effort is demanded on the one hand, on the other the physical conditions for movement in the muscles and nervous centres are placed at an ever increasing disadvantage. The awkward movements effected in hysterical paralysis, so like those seen in a mild case of chorea, strikingly

prove the absence of perfect relation between the muscles and the governing influence of the will.

Hysterical aphonia certainly presents hysterical affections in a remarkable point of view, when it is remembered how limited is the group of muscles thus left disregarded by the will. A very parallel case, however, occurs in retention of urine, wherein probably there is a still greater limitation in the muscular affection; the sphincter of the bladder being retained by emotional excitement in a state of abnormal contraction. It is further to be observed, with respect to the example just cited, that the retention will often occur in susceptible subjects, quite irrespectively of any other hysterical manifestations—e.g., after labour or miscarriage; and this, be it observed, despite of (perhaps, sometimes, because of) the earnest desire on the part of the patient to avoid the necessity for using the catheter. I witnessed lately a somewhat similar condition in a case of prolonged stupor after epileptiform convulsions. Whilst the insensibility was complete, the urine was passed involuntarily; but, as consciousness returned, the urine was retained.

In many of the cases of this description, some particular sensation of pain or of discomfort affecting the part, the muscles of which are subsequently affected by the hysterical paralysis, constitutes the first step in the morbid process, by fixing the attention upon the particular organ. Thus a cold or a sore throat precedes the attack of hysterical aphonia; dysuria precedes hysterical retention.

A curious illustration of the influence of a painful sensation in determining hysterical disorder of particular muscles, was afforded by a married woman aged 24, who was admitted into the hospital with asserted paralysis of the left arm, which, it was positively stated, had not been moved since the seizure, sixteen weeks previously. At the first moment, the case had the aspect of hemiplegia, with permanent rigidity of the paralysed arm; for the hand was clenched; the elbow was half bent; the arm was firmly fixed to the side; and great resistance was offered to any attempt at straightening the joints, such attempts being manifestly attended with pain. A moment's examination, however, suggested a suspicion of the real nature of the ailment; for the limb was well nourished; the muscles were plump; and it was soon evident that the muscles, in place of being excited to spasmodic contraction by passive extension, were disposed to yield to gentle though continued force. Moreover, the emotional developments, which were not long in appearing, afforded confirmation to the diagnosis. By moral management, of an appropriate kind, the limb was restored to its state of normal activity in the course of a fortnight, though not without much resistance on the part of the patient. On inquiring into the particulars of her history, we found that the reputed paralysis had taken place in the course of a night, and that it began with severe pain in the arm and shoulder after a particularly hard day's washing, which had completely exhausted her; and, further, that through the night she "could not sleep for the thought of it". We also learnt that she had been suckling for sixteen months, and had lately suffered severe grief from the death of her mother.

Nor is it only in muscular movement that the disorder of volition which characterises hysteria is manifested; we note the same disorder indicated by derangement of the faculty of attention—a faculty mainly dependent for its exercise upon an effort of volition. It is the suspension of this voluntary effort to call attention into activity, which is the cause of the so-called hysteric insensibility—a condition strikingly illustrated in the case which will follow.

The mind is completely occupied—perhaps by some intense sensation or severe pain; perhaps by a powerful emotion; or, in extreme cases, it may simply fall into a state of dormancy. In any case, attention no longer takes cognisance of the outer world; and the mind of the patient is entirely turned inwards upon itself. We see this mental phenomenon in its highest development in the mastiff which has fastened upon his antagonist, and is insensible to the most ingenious torments; in the maniac, who endures the most severe sufferings, self-inflicted under the influence of some dominant delusion; in the fakir, under the operation of fanatical superstition. In hysteria, in which the self-absorption is generally, though not always, less complete, the patient may be withdrawn from it by an invitation more powerful than the influence which has enchained the attention. Hence, the danger of trusting to the imagined unconsciousness of the patient; since mere curiosity will sometimes suffice to set the attention free.

One of my patients, of very hysterical temperament, suffered from an unusually protracted attack of gall-stones. The pain seems to have lasted for a week; and she tells me that she was quite insensible during the whole of that period, and knew nothing of what took place, and she inquired, on her recovery, whether the day (Tuesday) on which she should have posted a foreign letter had gone by, it being then Friday.

In conducting the moral treatment of these cases, it must be borne in mind that the nature of the hysterical developments will vary in different subjects, according as they are modified by the character of the individual. Thus, the disorder will not manifest itself in the same manner in the irritable as in the morose. Even the violent emotional development so generally, and so correctly, associated with our idea of hysteria may be wanting; and what, in one patient, would rise into a violent burst of tears or of laughter, in another, who is differently constituted, may settle down into stupid insensibility or dogged obstinacy. The variations of hysterical development with differences of individual character, are paralleled by the like diversities in the phenomena of intoxication which follow peculiarities of mental constitution. Thus, the inebriated may be quiet and despondent, or vehement and joyous; he is quarrelsome, or desires to be on terms of brotherly affection with all the world.

For success in the treatment, the control to be exercised, and the stimulus to be supplied, must be firm and steady, but free from harshness, and, above all, from irritability or passion. Violence or severity may succeed for the moment, by supplying the stimulus of fear or anger to replace that which has caused the disorder; but no permanent effect is produced; no foundation is laid for the establishing of self-control. The passing benefit is brought about simply by the substitution of one stimulant for another; and, like the result of all stimulants, is only temporary. Some short time ago, we had in the hospital two nurses who illustrated the correctness of the preceding remarks, by the difference observed in their respective characters; both were thoroughly sensible, intelligent women; each was quite "up" to hysterical maladies; and each alike desired by her management to bring the patients to make an effort for their own cure; but the one was harsh and petulant, whilst the other was quiet and resolute; and it was soon apparent in which ward the patients were most advantageously placed.

The following case, which has suggested the foregoing remarks, is one of unusual severity and duration. It presents, in prominent relief, the main characteristics of an hysterical affection—in the emotional temperament of the patient, in the obvious want of

all self-control, and in the foundation of the attack having been laid in strong emotion. Unfortunately, I could not induce the woman to come into the hospital; and, of course, I could do nothing for her as an out-patient; so that she speedily passed away from my observation.

CASE. E. B., aged 33, single. Case taken August 23rd, 1864. The patient has not spoken a single word since last May twelve months, when her brother died. She and her brother had lived together, and were warmly attached to one another; his illness was short, and his death was quite unexpected by her. Immediately after his death, she became violently hysterical, for the first time in her life; she was quite ungovernable; and, in the middle of the second night, left her bed in this town, and was afterwards picked up in the streets of Liverpool. There she was taken first to the workhouse, and then to the lunatic asylum; but, at the end of five weeks, she came to herself, and wrote to her brother, who carried her home. She has never had any recollection of what occurred during this period; affording a striking illustration of hysterical self-absorption. When found at Liverpool, she was speechless, and she has continued so ever since.

On returning among her friends, she continued in a highly excitable condition; falling into paroxysms of violent crying, in which she would cast herself upon the floor, and utter cries which aroused the neighbourhood; but it is remarkable that, even in these paroxysms of uncontrollable passion, she never uttered an articulate sound; the utterance was purely laryngeal; the only occasion on which she approximated to the act of articulation was once, when, having been rebuked by her sister for groundless doubts of her affection for her, she flew to a neighbour in a passion of tears, and cried something which might be interpreted, "Mary, Mary."

For the first month of her illness, her state of excitement seemed to threaten her life. She never returned to the house which had been inhabited by her deceased brother; nor would she even go into the neighbourhood of it.

At the beginning of her illness, she lost her sleeping powers, and she has never slept soundly since; she dreams, but does not see phantoms; she refuses to sleep alone.

From the first, all her communications have been carried on by writing, and she carries tablets about her. She complains of constant fullness and uneasiness in the throat, and is very slow in swallowing her food. She has much disinclination to meat, and requires urging to take proper meals. Her mental and bodily powers, in all other respects, have preserved their normal vigour; memory is clear, apprehension quick, muscular power entire; but her temper has become capricious; she is jealous and exacting, and constantly accuses those about her of decline of affection in their feeling towards her. She left one sister on these grounds; and compelled the sister with whom she at present resides, to throw up her employment for the purpose of taking care of her. Unfortunately, this sister yields to her in everything; and, by her devoted but mistaken kindness, fosters the patient's malady. She is particularly jealous of attentions shown to children in her presence; and at times she is obstinate and ungovernable.

Certain information is obtained that she is perfectly temperate in her habits. She was the youngest of the family, and was always much indulged; she acquired great appetite for being indulged, and for being the object of notice, and showed jealousy of any supposed neglect. She never had any hysterical development before her present ailment began; but she was rather "stupid and obstinate." She never



had fits, nor any other illness; nor is there any indication of nervous disease in her family. She has been losing flesh somewhat. Her menstruation is regular, but rather profuse.

She has the aspect of health, and is fairly nourished; though her face is rather sunken; her pupils are quite natural; and the contents of her chest are healthy. The inertness of her will is strikingly evident; to every question, she returns a feeble grunt; she has not even energy enough to nod or to shake her head sufficiently to be understood, until thoroughly roused to do so. During examination of her chest, she complained of the percussion employed; and it was only by means of alternate scolding and cheering that the examination could be got through without interruption by a hysteric fit. In examining her throat by the laryngoscope, it was long before we could get the mouth opened, and then further time was lost in inducing her to protrude her tongue. The faucial mirror excited much sobbing, but we obtained a complete view of the larynx, every part of which was in perfect order. The arytenoid cartilages moved equally, but during the examination were kept in apposition, probably from the sobbing tendency manifested by the patient.

As stated before, she speedily passed away from my observation.

### ST. GEORGE'S HOSPITAL.

#### OBSERVATIONS ON CEREBRAL HÆMORRHAGE, FROM AN ANALYSIS OF FORTY FATAL CASES.\*

By THOMAS JONES, Esq., Assistant Resident Medical Officer at the Hospital.

[Continued from page 639 of last volume.]

#### III.—ETIOLOGY.

**A. Predisposing Causes.** (1.) *Age.* Of the predisposing causes, age has a decided influence. We are indebted to Dr. Burrows for correcting a great many errors upon this point. Before this, writers seem to have repeated, as a matter of fact, without further inquiry, an observation of Hippocrates, who affirmed that apoplexies happened between the ages of 40 and 60 years.

Out of the 40 cases, I find the age was noted in 38; of which—

- 3 occurred between the ages of 30 and 40
- 13 occurred between the ages of 40 and 50
- 10 occurred between the ages of 50 and 60
- 9 occurred between the ages of 60 and 70
- 3 occurred between the ages of 70 and 80

*Prima facie*, this table shows a greater number of cases occurring between the ages of 40 and 50; but to form a correct calculation, we must take into consideration the relative number of individuals living in successive decades, as compared with the number of cases of cerebral hæmorrhage occurring in the same period. Now, out of a population, for instance, of 20,000, about one-half will have attained the age of 20 years; and out of the remaining 10,000, the number of persons living in the successive decennial periods, will be about 3,000 between the ages of 20 and 30; 2,500 between 30 and 40; 1,800 between 40 and 50; 1,300 between 50 and 60; 1,000 between 60 and 70; and 500 between 70 and 80. By comparing the number of cases of cerebral hæmorrhage with the respective number of population at similar ages, we

can easily calculate the proportion occurring in 1,000 persons in successive 10 years. Thus—

|                                  | No. | Population. | Per 1000. |
|----------------------------------|-----|-------------|-----------|
| Between the ages of 30 and 40 .. | 3   | 2,500       | 1.2       |
| Between the ages of 40 and 50 .. | 13  | 1,800       | 7.2       |
| Between the ages of 50 and 60 .. | 10  | 1,300       | 7.6       |
| Between the ages of 60 and 70 .. | 9   | 1,000       | 9.        |
| Between the ages of 70 and 80 .. | 3   | 500         | 6.        |

This table shows that the period of life at which the disease most frequently occurs is actually between 40 and 50, but relatively between 60 and 70.

(2.) *Sex.* Males are much more liable to the attack than females; for, out of 40 cases, 11 only were women. This shows the proportion of males attacked to be three-fourths, or 75 per cent. Possibly, this is explicable by the fact that they are most frequently exposed to the efficient causes of the disease.

**B. Exciting Causes.** There seems to me to exist a most intimate connection between diseases of the kidneys and of the heart and arteries, and cerebral hæmorrhage.

After excluding those cases in which the brain only had been examined after death, or in which but an imperfect examination of other organs had been made—because, for the present inquiry, a complete examination of all the important organs was necessary—I find myself possessed of notes of 36 fatal cases.

Of these, the kidneys were found extensively diseased in 29; showing the high percentage of 80.5. In 24 of these cases, the disease had arrived at an advanced stage of disorganisation; the organs were described as being small, hard, granular, with their cortical substance diminished; in some instances this was not thicker than a shilling. In 4, the kidneys were described as being large, soft, congested, and cystic, with old cicatrices on the surface. In another case, one kidney was found shrunken, leaving only a very small trace; whilst the other kidney appeared healthy.

Surely such a large proportionate number as 29 out of 36, or nearly 90 per cent, cannot be considered merely as the result of coincidence, but, on the contrary, as indicating a most intimate relation between disease of the kidneys and cerebral hæmorrhage. Besides, if the analysis be still further prosecuted, it will be found that renal disease bears a close relation to cardiac disease in these cases; for, out of the 29 cases in which the kidneys were found disorganised, the heart was hypertrophied to a great extent in 15; and this hypertrophy chiefly affected the left ventricle. In one case the heart was fatty, in three "very weak." Of these 19 cases in which were found alterations in the muscular structure of the heart, atheromatous deposits were found in 18 on the mitral and aortic valves, but probably not to such an extent as to give rise to obstruction, sufficient to produce the hypertrophy; hence we must look for a cause remote from the heart itself.

Of the remaining cases in which the muscular tissue of the heart was described as healthy, atheromatous deposits were found on the mitral valves in 6, in 1 of which there were thickening and opacity of the lining membrane on the right side; in 3 there were atheromatous deposits on the aortic valves, and the same kind of deposit on both the mitral and aortic valves in 5. Thus the heart was found more or less diseased in 29 cases; of these, alterations of the muscular structure occurred in 19, 15 of which were hypertrophied, 3 weak, and 1 fatty. In the remaining 10, atheroma alone existed; therefore these might have been classed with the diseases of the arteries. Thus we find that renal disease was associated with cardiac disease in 29 cases. In five cases both organs

\* From papers read before the St. George's Hospital Medical Society during the sessions 1861-62 and 1862-63; and before the Western Medical Society, 1862-63.

were described as healthy. It is an interesting point to note, that in almost all of these there was a history of injury to the head having occurred at some time or another before the attack.

Again, in pursuing the analysis still further, a most marked connection will be found subsisting between cerebral hemorrhage on the one hand, and disease of the kidneys and of the heart and cerebral and other arteries on the other. Thus, of the 36 cases, the cerebral vessels were diseased in 25; and the other large vessels of the body in 14. Cardiac and renal diseases were associated with disease of the cerebral vessels in 22. Renal and cardiac diseases, and diseases of the cerebral and other arteries, were associated in 10 cases. Disease of the heart was associated with disease of the cerebral vessels in 24 cases. But, of the cases of cardiac disease, it must be borne in mind that 15 only were hypertrophied; and of these, disease of the cerebral arteries occurred in ten only. In the remaining five cases of hypertrophied heart, the cerebral vessels were pronounced healthy. Disease of the kidneys, on the contrary, was associated with disease of the cerebral vessels in 22 cases.

The above analysis may possibly be better understood by viewing it in a tabular form, thus:—

| Cerebral vessels. | Other vessels. | Heart.*               | Kidneys.  |           |
|-------------------|----------------|-----------------------|-----------|-----------|
| Diseased.         | Diseased.      | Diseased.             | Diseased. | 10 times. |
| Ditto.            |                | Ditto.                | Ditto.    | 22 "      |
|                   |                | Ditto.                | Ditto.    | 29 "      |
| Diseased.         |                | Diseased.             | Ditto.    | 22 "      |
| Ditto.            |                | Hypertrophy of heart. |           | 24 "      |
| Ditto.            |                |                       |           | 10 "      |
|                   | Diseased.      |                       | Diseased. | 13 "      |
|                   | Ditto.         | Diseased.             |           | 13 "      |

By this we find that, in almost two-thirds of the cases, the kidneys, heart, and cerebral vessels were simultaneously affected. And in almost all those cases in which there was absence of disease in one or other of these organs, there was a history of an accident, to which the attack was attributed. This disease of the arteries consisted of thickening and deposit within, or on the surface of the coats.

These deposits were described as being either fatty, atheromatous, or calcareous. I have seen the small vessels, owing to calcareous deposit in their coats, sticking up out of the white matter of the brain after it was sliced, about an eighth of an inch in length.

The foregoing facts clearly point to a decided connection existing between the lesions of the arteries, kidneys, and heart; but in what the relation consists, and the influence which the lesion of each of these parts exerts in the production of the hæmorrhage into the brain, remain yet to be discussed. To do this, I must digress from the mode of investigation hitherto adopted in this inquiry, and soar to the regions of hypothesis. Most probably the kidneys are the organs first affected, and resulting from this the other lesions are developed, in the following order: diseased vessels, hypertrophy of the heart, and extravasation of blood in consequence of rupture of diseased cerebral vessels. Rather than attribute the disease of the vessels to some inexplicable or mystical causes, as we are wont to do, perhaps it would be well to attempt a more direct explanation.

Dr. Kirkes (in an excellent paper on this subject) has maintained that hypertrophied heart may possibly be the cause of such changes in the vessels. According to Dr. Kirkes, it was Dr. Dittrich who first propounded the theory that diseased arteries may be caused by hypertrophied heart, in consequence of

that organ keeping up a continual over-distension of the vessels, by the unwonted energy with which it propels the blood along the arteries. The coats of the vessels, being stretched and weakened by this continued pressure, undergo structural changes, somewhat analogous to the softening and degeneration which other strained and excessively exercised tissues often suffer.

The arguments adduced in support of this hypothesis are: 1, the frequency with which hypertrophy of the heart is associated with general arterial disease; and 2, the occurrence of the disease first, and chiefly, at those parts most exposed to the force of the moving blood, namely the commencement of the aorta. Dr. Kirkes adopts the same explanation, but, in addition, believes "that the coats, before degenerating, undergo a kind of protective hypertrophy to enable them to bear up against the increased pressure to which they are subjected, and that degeneration only ensues when this compensating over-growth has attained its utmost limit." Dr. Kirkes supports this theory by the narration of one case only, which, to my mind, does not prove that that condition of the vessels which he describes was due to the existing hypertrophied heart, inasmuch as the patient also suffered from a most extensive disease of the kidneys, quite sufficient to give rise to the lesion observed in the arteries.

Having regard to the result of the analysis of the cases which form the basis of the present inquiry, I object to the theory of considering the heart as being the cause of degeneration of vessels; because, first, how are we to account for the diseased vessels in more than half the cases in which the heart was *not* hypertrophied? Secondly, there is no evidence to show that degeneration of vessels takes place while the blood is in its normal state; for hypertrophied heart and diseased arteries were associated in all the above cases with renal disease, and, consequently, abnormal state of the blood. Lastly, seeing that the hypertrophy of the heart in these cases is but a compensating growth to supply the increased energy required to propel the unhealthy blood, I question very much whether there be *actually* more pressure from this cause upon the walls of the arteries than in health.

I think it is much more probable that the arterial lesion in these cases is caused by the renal disease. It is generally admitted that the small, granular and contracted kidneys—such as existed in almost all the cases under discussion—by their deranged function, alter the quality and quantity of the urine and blood. The blood, in being deprived of its chief staminal principle—the albumen—becomes diminished in density; and by the retention of urea and other solids of the urine it becomes absolutely poisoned, which considerably interferes with proper sanguification, so that this fluid is in turn rendered unfit to carry on the nutrition of the tissues of the body. Accordingly, we find almost always those persons who are the subjects of the renal disease, pale, anæmic, remarkably sallow, and the muscles soft and flabby. Probably the *arteries* suffer in a pre-eminent degree from this defective nutrition, which possibly may be the cause of their degeneration.

But this degeneration of the arteries may be produced from a more direct cause—as from the immediate effect of altered blood upon their walls. On examining the web of a frog's foot under the microscope, whilst the animal was under the influence of chloroform, the blood, which previously moved rapidly, soon became more sluggish in its movements—some of the corpuscles tending to stick to the sides of the vessels, and forming, as it were, a kind of a nucleus for more, until the vessels became completely blocked up with them.

\* Of the cases of diseased heart, hypertrophy occurred in 15.



Now, I can quite conceive a similar phenomenon taking place when the blood is poisoned by the retained elements of the urinary excretion. Indeed, it is a matter of not very unfrequent occurrence in hospital practice to observe a deposit or stagnation of the fibrinous part of the blood in the vessels of those individuals whose blood is altered in quality, such as in cases of chlorosis, phthisis, and other diseases leading to cachexia. I have seen not a few cases of chlorosis and phthisis at this hospital, in which the vessels of the lower extremities had become completely blocked up—a state of things possibly originating in that attraction which exists in health between the blood and the vessels being destroyed—thus necessarily leading to stasis of the blood, and collection of morbid materials retained in that fluid along the sides of the vessels.\* In disease of the kidneys there exists that condition of the blood necessary to occasion the same phenomena. Possibly, the retained elements of the urine and the fibrine of the blood deposit on the sides of the vessels, which may produce degeneration or atheroma of their coats, either by undergoing certain transformations, or by setting up a kind of chronic inflammation, terminating in the same pathological changes.

It is hardly necessary to insist upon what is now generally admitted as a well established fact by pathologists, namely, that hypertrophied heart is also caused by this degeneration of the kidneys. There are several conditions existing which call upon increased pressure on the part of the heart, and, consequently, involving increased muscular growth of its left ventricle to meet that emergency, some of which are: the abnormal constitution of the blood from the retained urinary excretion and diminished density, both of which cause that fluid to move through the vessels with less facility; the impeded transit of blood through two such vascular organs in consequence of structural changes; and lastly, the altered state of the vessels. That the heart requires much more power to propel blood through the arteries which have lost their elasticity, is self-evident. Hence, I maintain, first, that cerebral hæmorrhage, when associated with renal disease, is almost always found to be dependent upon rupture of one or more of the cerebral arteries, in consequence of certain morbid changes having taken place in their walls; secondly, that these changes in the walls of the vessels are induced by the altered state of the blood, the effect of advanced disease of the kidneys; and lastly, that the enlargement of the heart is the immediate effect of the renal disease, conjointly, perhaps, with the alterations in the coats of the vessels.

\* In these cases, I believe no inflammation is set up in the first instance; but subsequently there is reason to suppose that a chronic form of inflammation takes place.

[To be continued.]

NON-COMBATANT OFFICERS. Few, when they heard of the departure of the twelve physicians for Bermuda, ever thought of the dangers they would so soon meet; and yet they are as great as that encountered by assistant-surgeons Manley and Temple in their brave conduct at the recent engagements in New Zealand, and for which their Queen has decorated them with that badge of distinguished bravery the Victoria Cross. We cannot but admire the spirit of true heroism which is exhibited by the man who, at the call of duty, walks to almost certain death, in aid of his fellow-creatures, suffering from a malignant infectious disease; this, in our opinion, is of greater merit, than he who marches to the cannon's mouth, during moments of intense excitement. (*Canada Medical Journal.*)

## Original Communications.

### PENETRATING WOUNDS OF THE KNEE-JOINT, AND THEIR TREATMENT BY IRRIGATION.

By WILLIAM NEWMAN, M.D. Lond., St. Martin's, Stamford.

IN a paper which was published in the *BRITISH MEDICAL JOURNAL* for June 27th, 1857, I narrated five cases of penetrating wound of the knee-joint, and drew attention to the treatment by irrigation, followed, in each instance, by a speedy and satisfactory recovery.

I have no novelty to bring forward; but I am anxious to supplement the above-named paper by a further contribution, adding the few cases of the same injury which have, within the past seven years, come under my notice; and at the same time I would enter more fully into the merits and employment of continuous irrigation as an agent of extreme value in the every-day requirements of surgical practice.

CASE I. In January 1862, I was asked to see a groom (a man over 50 years of age), who had, twelve days previously, fallen from a haystack upon the cutting-knife, and had laid open, by a slanting incision on the outside, his right knee-joint. The man had been kept quiet in bed, and the injury had been treated by poultices, leeches, etc.; but he was suffering considerable pain, had had very bad nights in spite of frequent opiates, while the joint was swollen, the integuments around puffy and infiltrated, and a gaping wound was freely discharging pus and synovia.

Irrigation was recommended, and continued steadily for twenty-four hours; so securing to the patient a good night's sleep, the first since the accident happened. After that time, from disturbing causes, other treatment was determined on, and employed. A week afterwards (nineteen days from the infliction of the injury), irrigation was again resorted to, at the patient's own request; and the progress to recovery was steady and satisfactory. Sedatives were no longer necessary; the nights were good, and the wound healed. Constantly used at first, the water was, after some time, only allowed to drop on the knee when the joint became, even in slight degree, hot and painful.

CASE II. In May 1862, I saw a labourer, who had, two days before, sustained a punctured wound of the knee. The left knee-joint was distended by effusion, and painful in some measure; but the symptoms were not of the same urgency as those usually met with. Possibly, the extreme nonchalance and indifference which the man strongly showed existed physically as well as mentally; and his nervous system may have been singularly insusceptible of external impressions.

Irrigation was suggested, and carried out for six or seven days. At the end of that time, all joint-irritation had subsided; the swelling, also, had quite disappeared.

CASE III. The details of this I propose to give at length, since some of the main points are well illustrated.

W. P., aged 40, agricultural labourer, came to my house on August 23th, 1864, having walked a mile from his own house to a side railway-station, and thence travelled by rail; the transit had given him a good deal of pain.

On the preceding day, August 23rd, he had sustained a punctured wound of the right knee-joint from a hay-fork. The point entered on the inner side, half an inch below the level of the mid-line of the patella, and passed upwards and outwards directly into the joint. He had walked a mile or more to his house after the accident. The joint was soon swollen, and became very painful, so as effectually to prevent his having any sleep through the night.

At midday on the 24th, when I saw him, the knee was much swollen, and the joint tense with effusion. Pain was constant, and increased by pressure; and there was a blush of redness on the skin. He was told to return home, to go to bed, and to keep up constant irrigation of cold water.

August 25th. He had had some sleep in the night, and said he had much less pain. The knee was still hot and swollen. The treatment was continued.

August 26th. He was doing well. He had a threatening of shivering in the evening, which was stopped at once by taking some ammonia; no feverishness succeeded. The joint was easy, but still swollen.

The irrigation was continued constantly until the 28th.

August 28th. The knee was less swollen, not painful, not hot. He slept fairly well. He was ordered to discontinue the dropping for an hour or two at a time; resuming it at once if any pain or heat should occur about the joint.

August 30th. The knee was much smaller; the patella a little thrown forward; otherwise, the external conditions differed very slightly from those of the uninjured joint. There was no pain on pressure; and very faint evidence of fluctuation. He was ordered to continue irrigation for three or four hours each day, with longer intervals between the applications.

Sept. 1st. He was going on well. The swelling was even less than when he was seen two days previously. There was no heat, nor pain. He was told that he might cease the water-dropping unless pain or heat should come on; and also that he might sit up a little, supporting the limb in its whole length. (For this he had special and clear directions.)

Sept. 4th. He had a relapse; was not nearly so well. The knee was more swollen, and was distinctly hot to the touch. This was easily explained. He had been up daily, and had not used any irrigation since the 2nd instant; but had been seated (contrary to orders), with the limb extended, and resting by the heel only, on a low stool, so having no support behind the seat of injury. Further, as the limb, from this new position, began to ache, and the knee became hot, he had been applying for the past twelve hours cloths wet with cold water, *proprio manu*; and to do this had, on his own showing, moved his trunk forwards every five or ten minutes to reach the basin of water. I put a firm splint behind the knee, retaining it in place by a figure-of-8 bandage, sent the man to bed, and requested him to resume continuous irrigation.

Sept. 5th. He was better; was not in so much pain. The knee was still hot.

For the next seven or eight days, rest and continuous irrigation were insisted on; and, so much was the patient in fear that mischief in the joint might return, that he used the water even too thoroughly by voluntarily increasing the number of points from which the water dropped. Hence, he induced a heat of reaction, transitory, however, and not accompanied either by pain or swelling.

Sept. 15th. He was ordered to discontinue the use

of water entirely, and to move very cautiously, still wearing the back-splint.

Sept. 26th. The knee was normal in size and appearance. He could bear a little weight on it, and was now beginning to walk a little.

Oct. 12th. He walked well; had nothing to complain of, and would go to work the next day.

I would remark on this case that the first error was one of distinct omission on my own part. I ought to have applied a splint behind the knee in the first instance, and so provided against the possibility of any ill result from thoughtless movement. On this omission, in a measure, followed the relapse of Sept. 4th. More especially, however, was the recurrence of joint-irritation, due to want of care on the part of the patient. He failed to give to the limb, on first rising from bed, the support which he had been requested to ensure; and hence the terminal points, hip and heel, alone having a resting place, the articular surfaces of the femur and tibia were in constant and close apposition at the knee, as the central point; these surfaces having been the seat of sub-acute inflammation but a few days previously. Again, too, the continual movement of the trunk necessitated by the choice of wet cloths in lieu of irrigation, destroyed the chance of rest to the injured part, and kept the articular surfaces of the bones constantly rubbing one upon the other.

No sooner, however, was complete rest insisted on, and cold thoroughly applied, than the threatening symptoms began to subside, and the progress to recovery was uninterrupted, though slow. There was still, on Oct. 12th, a shade of general thickening around and about the joint; but the movements were not impaired, nor was pain induced by extreme flexion or extension.

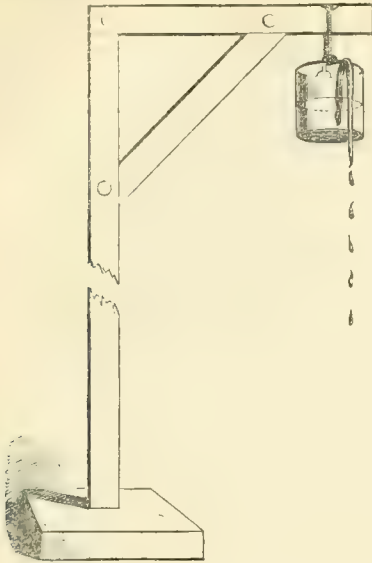
If cold be the appropriate remedy for any surgical affection, it is but a bare truism to maintain that it should be applied effectually. If this, then, is to be done in the case of some acute inflammation—of a joint, for example—the constant presence of an attendant will be imperative, who may apply thin coverings moistened with some frigorific or evaporating lotion to the part affected, and change these coverings at very frequent intervals, as they become either warm or dry. But to speak of such procedures as available or possible in everyday surgical practice would be absurd. How is cold, then, applied? Usually, a lotion is prescribed, and some material soaked in this is applied to the seat of injury. More frequently than not, and despite distinct orders, some three or four folds of material are used; thus more lotion is taken up, and the attendant's trouble is proportionally diminished. But the result is precisely the opposite to that desired by the surgeon—the surface of the cloth very speedily steams with moist vapour, while the deeper layers are reservoirs of moist heat; practically, indeed, a poultice is concocted, without the efficiency of that time-honoured compound, and this, too, employed under conditions where warmth and moisture are not desired.

This may be an extreme view; but I, nevertheless, claim for irrigation, or water-dropping, advantages which do not attend on the most careful employment of cold in the more ordinary forms. It is easily arranged; when once put in order, it is self-acting, even for hours; it is cleanly and effective. The absence or stupidity of an attendant will not interfere with the application; and for its employment, no appliances are needed other than may be found even in the poorest cottage.

A reservoir of water (iced, if possible), a jug, or some other convenient vessel, may be hung to some hook in the ceiling; tied to the frame of a bedstead; or, more elegantly still, some such stand as that, the



base and upper part of which are shown in the accompanying engraving, may be employed. It may be quickly constructed by any village carpenter.



The distance, from the injured part, of the water-supply, should not be less than three or four feet. If time be a great object in the treatment, or the symptoms of local injury be severe, a more speedy effect will result on the placing the jug at a greater distance above the bed on which the patient lies.

A few threads of lamp-cotton or Berlin wool, a narrow shred of flannel, or a strip of lint from the pocket-case, may do duty as a syphon. First well-soaked in water, the shred must so be placed that one end lies at the bottom of the jar, while the other one hangs outside at a lower level. A continual dripping will so be kept up until the cistern is exhausted.

The injured part should be kept immoveable; the knee-joint should be fixed by a back splint sufficiently long and well padded, this being kept in place by a figure-of-8 bandage. The turns of the bandage must not be too tight, for, when wetted, the material shrinks very perceptibly; nor is it necessary to cover the joint itself with the folds. From hip to ankle the limb should be thoroughly supported; and, to insure this, the patient should be kept in bed. Waterproof sheeting, or an oil-cloth covering from a table, should be stretched beneath the limb, so as to prevent the wetting of the mattress; and, by adjusting this covering, a channel may readily be made, so as to direct the waste water into some dish placed on the floor.

Next, as to the time during which this mode of treatment may be carried on. I have continued the dropping uninterruptedly for eight or ten days more than once, and without ill result; then, intermitting the flow for an hour or two at a time, I have continued the same plan for a second similar period of time—three weeks in the whole. The time usually employed is about seven or eight days; and this may be extended or shortened, according to the special requirements of each case.

There seems to be little if any advantage from the addition of pharmaceutical compounds to the water in the jar. Possibly, when the rapid exhaustion of heat from the damaged part is a matter of impor-

tance, it would be well to add some spirits of wine to the water; or even the hydrochlorate of ammonia or nitrate of potash might be of some benefit. The instances (one or two) in which I have used some such salt, have not impressed me with any decisive idea of increased good.

In the hot weather of summer, I have been glad to resort to the use of ice; adding this to the water in the jar, so as to reduce the temperature much below that of the surrounding atmosphere.

The good effects which follow the persevering use of irrigation have seemed to me to depend far more on the constant evaporation of the thin layer of fluid which spreads itself over the injured part, than on the exact temperature of the water employed, or on any qualities which may have been obtained from its admixture with other substances, frigorific or sedative.

This mode of application of cold should be used more to prevent than to arrest inflammation; to bar the development of increased vascularity, with its subsequent bad results, rather than to procure the removal of this morbid condition, once established. Hence the rule, that irrigation should be used as speedily as possible after the injury has been inflicted. When so applied, the conditions of heat, swelling, and pain will not appear; and this good result is probably to be attributed both to the sedative influence of the cold on the cutaneous nerves, and to the diminution, from the same cause, of the absolute amount of blood circulating in the capillary vessels in and around the joint. Not, however, that the occurrence of actual inflammation in an injured joint should prevent the surgeon from resorting to this most effective means of reducing the abnormal temperature. The first case noted in this paper sufficiently proves its usefulness under such conditions. Still, if irrigation be used for the first time in the second stage, the good effects will be less speedy, more slowly evident; and certain subsequent changes in the affected textures must be expected to occur—thickening, stiffness in movement, etc.

Even under these less favourable secondary conditions, I incline to believe that irrigation has a material advantage, in comparison with the more ordinary plans of treatment. Cases may well happen in which the immediate local abstraction of blood will appear to be indicated, if only with the intent of relieving the pain of intense local congestion; but, after this, the use of cold would again be available.

Dr. Esmarch's valuable paper, issued in one of the volumes of the New Sydenham Society for 1861, will have brought before the readers of this JOURNAL the uses of cold in surgery. There may be a shade of presumption in venturing to maintain the possible superiority of irrigation over the use of ice-bags, or of thin iron vessels filled with cold water; yet I would still think this agent in the first form more thoroughly efficacious in the treatment of a punctured joint; whilst it is certainly not open to some of the objections which seem to attend, occasionally at all events, the use of ice-bags.

I am glad to be able to adduce the testimony of high professional authority in favour of the plan I suggest. Mr. Hilton, in his *Lectures on Rest and Pain*, p. 439, cites a case of incised wound of the knee-joint treated by irrigation of iced water, continued day and night for twenty-three or twenty-four days. Experimental removal of the cold irrigation was followed almost immediately by pain, heat, and swelling of the joint. The final recovery was perfect.

It may seem—and there is truth in the objection—that this paper is but a weary and tedious reiteration of the advantages of cold as an external application—so small a matter, and so universally acknowledged,

that a title of the space occupied would have sufficed to enumerate the material points. At the same time, the minor points of surgical practice are just those which need most frequent enforcing; and on their observance will often turn the issue of a serious injury. I would venture to claim for my paper honesty of purpose, while I believe that its dicta have truth as their foundation.

## Transactions of Branches.

### READING BRANCH.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By FRANK WORKMAN, Esq.

[Concluded from page 102.]

*Amputation at the Knee-joint.* Mr. G. MAY described a recently introduced method of amputating at the knee-joint, which had been practised two or three times at the hospital. A long anterior flap was made by reflecting the skin from the knee and head of the tibia, the knee-joint was then opened and disarticulated, and the knife passed nearly straight through the tissues behind. The anterior flap was thus made to furnish nearly entirely the covering to the stump, and the thickened skin of the knee came just where the stump would afterwards have to bear pressure. The patella might be removed or left without disadvantage. In the latter case, the quadriceps extensor drew it out of the plane of pressure. The case on which he had recently operated was that of a child, who had been under Mr. Harrison's care with acute necrosis of the tibia; a large amount of matter formed, to which free exit was given, but pyæmia followed, and very nearly carried the child off; under careful treatment it rallied, however, and was then sent into the hospital, where the above operation was performed, and the child has since been doing well.

I believe I have now given you a *résumé* of all the pathological specimens and papers that have been brought before us during this past year; and you will, I hope, agree with me, that though no doubt much more might have been done, yet the retrospect shows that a very varied and instructive set of cases have been discussed in the course of the session—not, it is to be hoped, without some advantage.

I now proceed to miscellaneous subjects, not directly connected with morbid specimens or disease, which have occupied our attention.

*Feeding of Children.* Mr. G. MAY introduced a subject of great importance to those to whom destiny has assigned the cares of a family—and proportionately more so to medical men, whose advice is sought for guidance under difficulties—that of feeding infants who are deprived of the natural fount; and in few things more strikingly is seen the curse of ignorance than in the agonies inflicted on a wretched helpless infant by being stuffed with thick pap or some indigestible food by its ignorant attendants, and the consequent disturbance day and night of the household by its pitiable shrieks. It was agreed that cow's milk, diluted with water and sweetened with sugar, was a satisfactory diet for most children; and it was suggested that sugar of milk possesses advantages over common sugar in that it is less apt to undergo fermentation, and so to give rise to acidity in the stomach. Care should be taken that the milk should be the unmixed produce of one cow, and that cow not far advanced in lactation. Two causes in particular prevent this diet from always meeting with success: one is the increased amount of caseine met with in cow's milk, nearly one-third more than in human, which, in-

stead of being digested, often forms hard lumps and strings in the child's stomach and bowels, producing the utmost distress until they are ejected. This source of trouble may be avoided by using whey with the addition of a little cream and sugar. The second cause prevails mostly in towns where the cows, fed and housed in a most artificial and unwholesome manner, revenge their wrongs on the superior race which so maltreats them, by supplying them with a depraved fluid in the place of wholesome milk, which speedily becomes acid, and consequently is totally unfit for a child's stomach. When, however, the cow's milk, from whatever cause, does not agree, it is well to make trial of the milk of the donkey or goat; either of these assimilates more nearly to the composition of human milk than does the cow's, and the animals themselves, being more hardy than the cow, and seldom so badly off for food, air, and exercise, are more likely to supply a healthy fluid. A strong testimony to the value of goat's milk is borne by the results of the Dublin Foundling Hospital, which almost alone of the Foundling hospitals of Europe does not show an excessive mortality amongst its infants; and their escape seems due to the fact that, instead of being retained in one crowded building, they are sent up to the Wicklow mountains, where a goat is allotted to each child, and is brought at certain hours for it to suck; on this diet they seldom fail to thrive. Habitual constipation in young children is to be regarded as proof of an unsuitable diet, and all active aperients are with them specially to be avoided, where a carefully regulated diet does not induce regular action of the bowels. The use of salad oil, frictions over the abdomen, and palpation in the course of the colon, will often suffice.

*Resuscitation of Drowned Persons.* Lastly, I come to a subject which excited some considerable interest at the time, which arose out of a request from the Royal National Life Boat Committee for our opinion on the relative merits of the Plans of Dr. Marshall Hall and Dr. Silvester for restoring persons apparently drowned. Though probably Reading is not much behind most other towns in the opportunity it affords to its medical savans for studying the question, I fear we should have found some difficulty, if left to ourselves, in forming and supporting a reasonable judgment; the truth being that the few cases that occur to individual members, often presenting different features and degrees of suspended animation, are of little use in leading to the discrimination between two methods based on the same principle, and each useful, though it may be in a different degree. Fortunately, Dr. B. W. Richardson of London was present at the meeting, and was kind enough to give us the results of the experiments and researches he had made on the subject. He told us that he had tried respectively the plan of Dr. M. Hall, Dr. Silvester, and the bellows-method; the latter originating with J. Hunter, and having a double action for throwing in and exhausting the air. If these plans are to be judged by the amount of air they introduce into the chest, then the bellows carries off the palm of superiority. Fifteen cubic inches of air seems the best amount of air to inject; and this the bellows will accomplish, and extract it as well. By Marshall Hall's method, eleven inches are drawn into the chest; and by Dr. Silvester's, twelve. So the latter seems to have an advantage over the former, and is, in addition, the most convenient, as it could be practised by a single individual, whereas Dr. Hall's method requires the cooperation of at least two or three. Dr. Richardson, however, went on to say that, in the course of his experiments, his ideas underwent a complete change; the result being, that he came to the conclusion that all artificial means of restoring respiration were not only useless, but inju-



rious. He thought the first object to be obtained was the restoration of the circulation, and that then the respiration would follow of itself; as in new-born children the circulation is in action at birth, and respiration naturally follows. He took six animals, and subjected them to the influence of chloroform until their respirations were brought down to  $1\frac{1}{2}$  a minute. He then laid them in a row, and tried different methods of artificial respiration on some. These invariably died, while those which were left alone recovered. A similar illustration was afforded by the fate of Captain Harrison of the *Great Eastern*, who, having been capsized in a boat, was brought out of the water to his ship alive and capable of speaking and drinking, yet, under the influence of Dr. Hall's plan of restoration, he succumbed after twenty minutes; while a sailor, in a similar state of suspended animation, being placed in the engine-room and left alone, recovered. A young lady, on whom chloroform had produced a very alarming effect, was, by Dr. Richardson's advice, placed in the fresh air and left alone, and she came round; but Dr. Snow, using in a similar case galvanism, lost his patient. In Dr. Richardson's opinion, the cause of death is not entirely due to the presence in the lungs of water and carbonic acid, but in part to a mechanical cause. The circulation through the lungs partook somewhat of the character of a syphon. While ever so small a stream was circulating, there were hopes of its increasing strength; but, if it had once been entirely broken off, the power of the heart would be insufficient to re-establish it. The somewhat violent action used in artificial breathing might be the means of checking this small current, and so produce fatal results. He recommended that those whose animation was suspended should be left alone in a warm room, of the temperature of  $130^{\circ}$  Fahr., if possible. Friction of the limbs might be of service, though he did not place any great confidence in it. The congestion of the lung sometimes noticed depended on the circumstances. If an animal were plunged head foremost into water, and there held till dead, no congestion would be found; but, if it were allowed to come occasionally to the surface and obtain a little air, intense congestion would be produced.

In accordance with these views, an answer was sent to the National Life Boat Committee, that, in the opinion of the Reading Pathological Society, Dr. Silvester's method was preferable to Dr. M. Hall's; but at the same time we felt that the subject required further investigation, as the results of Dr. B. W. Richardson's experiments seem to cast great doubt as to the benefit said to be derived from the promotion of artificial respiration. It seems, however, from the directions recently issued by the National Life Boat Committee, that Dr. Richardson's views have not at present obtained general consent, as their directions are in entire variance with them. They recommend Dr. M. Hall's plan to be first tried for about ten minutes, and, if success is not then obtained, to make trial of Dr. Silvester's; and they say: "The points to be aimed at are: first, and immediately, the restoration of breathing; and secondly, after breathing is restored, the promotion of warmth and circulation. Efforts to promote warmth and circulation of blood, beyond removing wet clothes, must not be made until the first appearance of natural breathing; for, if circulation of the blood be induced before breathing has recommenced, the restoration to life will be endangered." Nothing could well be more opposed to the results of Dr. Richardson's researches; and as he, I think, quite carried his hearers at our meeting with him, it would be interesting to know on what grounds these instructions were drawn up,

and the experiments of Dr. Richardson so totally set aside.

Gentlemen, I bring my task to a conclusion; and for that, at any rate, I have no doubt you will thank me. I told you in the first place, that, unwilling to provoke a comparison between myself and Mr. Marsh, to whose eloquent comments the last address owed so much of its value, I should leave the transactions of the Society to tell their own unadorned tale; and I am very sensible that, in my hands, they have lost much of the salt which originally flavoured them when they came new to our ears, and we listened with poised judgment, preparing to question or criticise when the case was completed. The more reason have I to thank you for the kindness and patience with which you have heard me.

## Reviews and Notices.

STIMULANTS AND NARCOTICS, THEIR MUTUAL RELATIONS; with Special Researches on the Action of Alcohol, Ether, and Chloroform, on the Vital Organism. By FRANCIS E. ANSTIE, M.D., M.R.C.P., Assistant-Physician to Westminster Hospital, etc. Pp. 489. London: 1864.

THIS book aims at no less than a reconstruction of our therapeutics, which at present, according to the author, repose on the metaphysical basis of old vitalistic notions.

Whether this be a true representation or not, we fail to see that in his reconstruction he has found a safe basis for himself or others to build upon. His theories are for the most part verbal, with definitions and limitations to suit. He distrusts analytical methods of investigation, whether chemical or physiological, preferring "the teaching of experience at the bedside, and of the daily practice of large classes of men, whose dietetic habits the physician necessarily becomes familiar with, to the dicta of a science, like physiological chemistry, which, notwithstanding its rapid progress of late years, is still in a merely rudimentary condition."

He evidently does not agree with Mill, that synthesis cannot be greater than the corresponding analysis.

The book is pleasantly written, and is easily read; but the method of it is faulty, by reason of its synthetic character being unsupported by any adequate analytical elements; and unphilosophical, through want of precision of expression, from a certain vagueness of language and definitions, its more ready perception of resemblances than of differences, and a disdain of proof.

As to the ground of his work, Dr. ANSTIE tells us:

"The elements of the problem to be solved are, simply, the existence of two classes of physiological agents, respectively known as stimulants and narcotics (or sedatives), and of an intermediate class known as narcotic-stimulants (or, in looser phraseology, as narcotics); all three classes acting on the nervous system: the stimulants having the power of exciting its action; the sedatives, of depressing the same; and the narcotics or narcotic-stimulants, of producing both kinds of effect. It is to this latter class, as forming the meeting-point of the two kinds of physiological action, that our closest attention will be required; and it is to this class that the three sub-

stances which have been chosen for detailed investigation belong; as do also tea, coffee, tobacco, and the whole genus of soothing care-breaking luxuries so freely used in every-day life." (P. 4.)

It would have been useful, not only to his readers, but to the author himself, had he more clearly illustrated by examples what he means by the two classes of agents said to act solely as stimulants or as narcotics. Ammonia and oxygen form the nearest approach to such a definition among stimulants.

"Substances like ammonia, which are universally allowed to act as *pure* stimulants, are in no case chargeable with the production of any such phenomena as are supposed to indicate mental excitement, though they may restore consciousness, when temporarily lost." (P. 81.)

Here we hoped that we had at last found a *pure* stimulant, but further on we found our error.

"The ordinary medicinal use of ammonia is as a stimulant; and we have the best reason to suppose that its action in this way is a legitimate one, as it does not produce after-depression. Yet there can be little doubt that we gain important benefits from its excessive and narcotic action. For ammonia in full doses is a *narcotic*, and may even produce fatal narcotic effects (convulsion, palsy of the heart, etc.)" (P. 225.)

Of oxygen he says:

"No one will deny that it is a stimulant of the first rank. . . . If we were to condense into the shortest space the various therapeutic actions of oxygen, we could hardly express its efficiency better than by saying that it prevents or relieves pain; averts the disposition to muscular convulsion, tremor, and spasm; reduces excessive secretion; calms an unduly frequent circulation; removes general debility and special fatigue of particular organs; quiets the disturbed brain; compensates in great measure the absence of ordinary food; promotes local nutrition; in short, that it produces with tenfold greater efficiency all the results which we seek for by the use of medicinal stimuli such as those to which I have already alluded." (P. 153.)

"If anything deserves the name of a *food*, oxygen does." (P. 155.)

This marvellous account of the dietetic and therapeutic value of oxygen made us distrust our memory, and led us to consult our books, where we found, as we expected, that animals breathing an atmosphere of pure oxygen become narcotised (even by our author's definition), and die of coma.

But though it might be thought, from the extracts which we have given, that it was of oxygen that our author was speaking, it turns out to be the common air that he means. He establishes a contrast between that of a "London alley", an "agricultural village", and a "breezy sea-side hamlet"; and, further, between "a child bred in a London cellar", and "a Cornish fisherboy, such as Hook loves to paint". We should like the author to have shown how these differences were related simply to differences of oxygen. To our minds, the differences are chiefly referable to differences in the amount of light and pure air.

This may be taken as an illustration of the laxity of thought and language, which our author too often permits to himself.

We call the author's attention to his opening statement of the "elements" of the case, and ask him to enumerate his agents of the two first classes. We

shall be much surprised by his success in the attempt. We believe that, in all cases, it is the variable *quantum* of the agent which produces the *qualé* of the action. Thus we may have light to see, or effulgence to blind; heat to warm and quicken, or to destroy vitality; cold to invigorate, or to produce narcosis and fatal coma; and so on of all.

In the chapter on the Doctrine of Stimulus, the author brings under this head two very different subjects—the various theories concerning the innate vital spirits or forces; and the views of some moderns on stimulant remedies. "Stimulant" and "stimulus" are used quite indifferently by our author, as equivalents, in many instances. In the table of contents (p. xii), we meet with:

"Modern writers on therapeutics, and their definition of stimulus: *e. g.*, Pereira; Wood; Neligan; Headland."

On turning to these references, we find:

"Dr. Pereira classes stimulants"—

"Dr. G. B. Wood describes stimulants"—

"Dr. Neligan defines stimulants"—

"Dr. Headland does not explain how stimuli"—

"One of the greatest difficulties which the ordinary theories of stimulus have to encounter is the explanation of the action of the so-called antispasmodics. These substances form a subclass of *stimulants*. . . . But if nerve-force be the source of muscular contraction (of which spasm is only a variety), how can we explain the fact of *stimuli* acting in this way?" (P. 73.)

"It is impossible for us to advance a single step towards a satisfactory explanation of the true office of material stimuli." (P. 105.)

We next shall put together our author's various explanations and definitions of stimulants and stimulation.

"*Stimulants* have the power of exciting the nervous system." (P. 4.)

"*Stimulants* are "agents which by their direct action tend to rectify some deficient or too redundant natural action or tendency." (P. 161.)

This is the first of his three reconstructive proposals. The italics are his own.

"Therapeutical stimulation not improbably includes not merely the impulse to act, but a supply of the materials which are necessary for action." (P. 105.)

"True stimulation is the supply of some missing influence requisite to that balance of the powers and materials of existence which we call life." (P. 252.)

We leave these definitions to the consideration of our readers, as specimens of our author's reconstruction. Vague and metaphysical, they are surely without instruction; and, with the exception of the first, are mere verbal syntheses, reposing on no analytical elements.

Let us next see what are *not* stimulants. He proposes:

"That agents which produce excessive and morbid action of any kind in the organism be refused the name of stimulants, even though small doses of them may act in a truly stimulant manner." (P. 161.)

This sentence, which is the second of the three reconstructive proposals, would, if effect could be given to it, abolish stimulants altogether. Brandy, ammonia, and every stimulant agent, may and does produce excessive and morbid action, when taken in quantities adequate to produce the effect. The agent is the same; but, as we have already said, the *quantum* varies, and the resultant action varies with it.



Here we have the old confusion between *agent* and *action*. The author seems to mean :

"When agents produce excessive and morbid action of any kind in the organism, such action should be refused the name of stimulant, even though smaller doses of the agents may act in a truly stimulant manner."

Even thus stated, it amounts merely to a nominal definition.

We will next give the definition of *narcosis proper*. (Why proper?)

"Narcosis proper may be described as a physiological process, in which the nervous system is deprived, by the agency of a poisoned blood-supply, of its vital characteristics, with greater or less rapidity, and which directly tends to produce general death of the organism by means of such deprivation"—a "devitalising power." (P. 173.)

We are glad to find that our author allows narcosis to be a physiological process, though we should hardly have used the word where he does. But it enables us to ask him what are the physiological narcoses of the nervous system; as, if we knew, we might succeed in linking in a continuous catena the phenomena of stimulation and of narcotism.

The description given above is applicable only to extreme cases of fatal coma, which may, and most probably do, form part of the reciprocating play of the different parts of the nervous system. Can our author deny that narcosis of the sympathetic system has a share in producing the phenomenal effects of stimulants? Is sleep not a natural narcosis of the cerebral part of the nervous system? Our author dogmatically says, No! "Hypnotism is no part of the rôle of narcotics. Coma is."

"True sleep is a part of the cycle of daily natural processes, and can only be induced, if it be morbidly absent at a time when the system has need of it, by remedies which reinduce a normal state of the physical organism—by stimulants in the sense in which I understand that word. Hypnotic or soporific influences will therefore not be reckoned by me among the phenomena of narcosis." (P. 172.)

Here again the distinctions are verbal only, and in extremes. There is no attempt at an explanation of the *modus operandi* of either stimulants or narcotics. The point of discrimination between the phenomena of the one and those of the other is not marked.

Our author does not seem adequately to have appreciated the complexity of the problem which he has set himself to solve. He chooses to view the sum of life—vitality—as an unity—an internal copula—an individuation—an equilibrium of forces in a fixed organism; or, to quote his own words,

"The standard of life is a certain exact balance of various forces, developed with a certain constant relation to material tissue arranged in a definite manner." (P. 112.)

(The italics are his own.)

We may mistake our author's meaning here; but it seems to us a much closer description of the essentially static condition of mineral existence (apart from the word tissue), than of the ever-varying dynamics of organic and animal life.

Having got his unit—vitality—his argument constantly is: Do we increase this by destroying the balance? But life is rather a free libration of many forces mutually disturbing each other, and calling forth phenomena of reciprocal exaltation and depression.

We next proceed to show our author's appreciation of *differences*.

Having laid down the view, that the type of the stimulant class of remedies is found in foods, after discussing phosphorus, sulphur, the volatile oils, cod-liver oil, common salt, iron, etc., he says:

"It may be preferable to preserve the name of stimulants for the more rapidly acting remedies; but this is the only distinction we would desire to see made between foods and such stimulants as we have now mentioned in a therapeutic point of view. . . . The one important difference which really does exist between stimulant drugs and the substances ordinarily called foods is, that the former make no considerable positive increment to the bulk of the tissues." (P. 160.)

What is the value of these adjectives? Is any positive increase proved scientifically? Our author shall reply.

"Finally, there are a number of substances, of which we are not able to prove that they are either used for the repair of the tissues, or transformed in the body so as to generate heat; in this class we place alcohol, chloroform, the æthers, various alkaloids, strychnia, morphia, and the vegetables which contain them."

Yet to doubt the histories of people subsisting entirely and for months on dilute alcohol, without any analyses of their excreta or ingesta, is, in the opinion of our author, "dishonest".

"After all, every possible allowance being made for exaggeration on the part of the witnesses, from whom Dr. Inman, his medical friends, and myself, have derived the above histories, it must in common justice be allowed that there remains a substratum which cannot be explained away, and which it would simply be dishonest to ignore." (P. 455.)

A scientific author cannot rightly use such language, so long as he himself is obliged to own that he is unable to prove his thesis. Few have such facility of belief as to say, with Tertullian, "*Credo, quia impossibile est.*" All have a right to demand as rigorous proof as the matter is susceptible of, before giving credit to highly improbable facts. At page 279, to render these more probable, our author hints that the missing nitrogenous element may, in some pathological conditions, be derived from the atmosphere; and says that "this is a fundamental point to establish in deciding as to the possibility of maintaining the balance of material nutrition in certain circumstances, without the aid of ordinary foods, or with an insufficient supply of them."

There is nothing in this volume which in the least advances this point of the matter at issue, in the way of *proof*. So long as this is the case, we hold it, to use a politer French derivative, *malhonnête* to impute dishonesty to doubt.

We have felt it our duty to point out the defects of method, thought, and language, which we have found in this treatise. The philosopher cannot hope to reach truth through verbal theories.

What above everything is wanted to us at this moment, are rigorously deduced facts touching the effects of remedies. We rise from the perusal of this work gratified with the skill and cleverness of its author. But what has he taught us as physicians engaged in the business of treating diseases? or what sort of basis has he laid on which future inquirers can hope to safely build up an advance?

PHOTOGRAPHS (COLOURED FROM LIFE) OF THE DISEASES OF THE SKIN. By ALEX. BALMANNO SQUIRE, M.B. Lond.; Surgeon to the West London Dispensary for Diseases of the Skin; etc. Nos. I, II, III. London: 1864.

We have long considered photography to be capable of very useful application in the illustration of anatomical structures and pathological appearances. Several attempts in this direction have already been made with much success. Mr. BALMANNO SQUIRE has lately undertaken to bring out a series of typical representations of the various groups of skin-diseases; and, if the numbers which are to follow shall be as good as those which have already appeared, he will have done a work of great use to the practitioner. Photography, of course, can do little but represent form and position; but this it does accurately; while the necessary colouring is effected by an after-process, from the living subject.

The three numbers which we have received for review represent severally, 1, Psoriasis Diffusa (Squamæ); 2, Impetigo Figurata (Pustulæ); and 3, Lichen Invetetratus (Papulæ). Each figure is accompanied with a sheet of letter-press, containing a concise account of the characteristics of the disease represented, and a brief history of the case from which the photograph was taken.

We hope that Mr. Squire's attempt to place before the profession faithful representations of skin-disease will be appreciated as it deserves.

LECTURES: CHIEFLY CLINICAL. By T. K. CHAMBERS, M.D., Honorary Physician to H.R.H. the Prince of Wales; Physician to St. Mary's Hospital; etc. Pp. 599. London: 1864.

THIS volume is a third edition of the Lectures previously published by Dr. CHAMBERS under the title of *The Renewal of Life*. Dr. Chambers has wisely changed the title, in deference to the opinions of his critics, and because he feared that it laid him open to serious misconception.

The volume is much enlarged. It contains twenty-three new Lectures, comprising three given at the College of Physicians. We have nothing to say of it but what is very warm praise. The author is an excellent writer. He most thoroughly and conscientiously studies his subject; and then, in a true philosophic spirit, places it before his auditors. His lessons are not mere sketchy outlines of the matters upon which he discourses, but well-considered deductions drawn from his own observation of disease, enlightened by modern physiology and pathology. They are models of what clinical teaching should be. The lecturer has complete faith in his art, and at every page keeps alive that impression in his auditory. He has advanced with all the scientific knowledge of his day; and, whenever practice can get a gleam or a little warmth from that source, he brings forth from his store the help and the guide of scientific knowledge. His lectures, too, are essentially clinical; his students may themselves try what he tells at the bedside of the patient. These lectures, in a word, do great credit to their author, and to the school where they were delivered.

Such is the general impression which a perusal of these lectures has left upon us. To enter into any details of them is, of course, out of our power here,

and, we believe, quite unnecessary. The fact that they have already reached a third edition indicates well the favour which they have found in the eyes of the profession, and renders our recommendation of them to the perusal of the practitioner as well as the student unnecessary. To say that there are very many things—points of practice, and arguments, and conclusions—from which we differ, is only to say that we practise medicine. If there were any fault in this way which we should charge to our author, it would be the most pardonable of all faults—viz., a too full trust in the power of his remedies over diseases, and a too ready acceptance of the scientific explanation of their *modus agendi*. Not but that it is most desirable—indeed, the duty of the teacher—to impress upon the mind of the student confidence in the power of his art to cure diseases. What we desire is, that both sides of the question should be fairly presented to the student; that he should be taught a just, and, as far as may be, an accurate, estimate of the efficacy of pharmaceutical agents over diseases. If there be any fault more than another that we feel inclined to bring against some of the *paterne conscripti* of our art, it is this: that they are apt to judge too severely those who profess a reasonable scepticism touching what may be called this or that orthodox method of treating diseases. How little fear there is of people in these modern days taking too few drugs, may be readily gathered from the flourishing condition of our druggists' shops. We do not accuse our author of anything of this kind, but only suggest that he too readily, as we think, gives faith to the curative powers of certain drugs.

TREATMENT OF DISEASES OF THE SKIN. By Dr. WILLIAM FRAZER, Lecturer on Materia Medica in the Carmichael Medical School. Pp. 174. Dublin: 1864.

THE construction of this book is somewhat peculiar. The problem sought to be solved in it is not: Given, a disease and its description, to find a remedy; but; Given, a medicine or class of medicines, to find to what disease or diseases it is applicable. Dr. FRAZER heads the fourteen chapters of the book in the following manner: 1. Alteratives No. I: Mercurials; 2. Alteratives No. II: Fowler's Solution, etc.; 3. Alkaline Preparations; 4. Chalybeates; 5. Quinine and Tonics; 6. Cod-liver Oil; 7. Sulphur and its Compounds; 8. Terebinthines; 9. Anodynes; 10. Emollients; 11. Desiccants; 12. Baths and Mineral Waters; 13. Poultrices; 14. Caustics and Irritants. And, in speaking of each of these classes, he points out in what cases of skin-disease the remedies belonging to the class are appropriate.

The book appears to give a fair representation of what Dr. Frazer has found to be useful in his practice, in the treatment of diseases of the skin; and is thoroughly practical in its detail.

BARON LIEBIG. The *Moniteur Belge* contains the following extract from the *Journal de Francfort*:—"A friend writes from Munich that the celebrated chemist, Baron Liebig, is about to resign his professorship and laboratories at the University of Munich, with the intention of settling in London to occupy an important position which has been offered to him *par la grande compagnie du balayage et des vidanges de Londres*," whoever they may be. (*Chemical News*.)



# British Medical Journal.

SATURDAY, DECEMBER 3RD, 1864.

## THE NEW INDIAN MEDICAL SERVICE WARRANT.

WE trust that, in publishing the latest dispatch of Sir C. Wood, or, as we may call it, the NEW WARRANT FOR THE INDIAN MEDICAL SERVICE, we shall be giving sincere gratification to all who are interested in that long waiting but meritorious class of our fellow-subjects. It is evident that the Indian Secretary has been impelled to make some concessions through the pressure of public opinion, acting through Parliament and the press; such concessions being tardily offered. Late advices from India show that they have already been anticipated to a certain extent by the Viceroy, who has declined to put in force the provisions of previous orders promulgated by the Indian Secretary, being so evidently injurious and unjust to certain portions of the Department.

In the preamble to this very long dispatch of the 7th ult., Sir C. Wood recapitulates the various steps which have been taken by the present Government to adapt the service to the altered state of things, brought about by the dissolution of the East India Company. It appears that, in accordance with a recommendation of the Indian Government of 1862, Sir C. Wood submitted a scheme of *amalgamation* of the British and Indian Medical Services for the opinion of Earl De Grey, the Secretary of State for War. This officer objected to the plan proposed, chiefly on the ground that any temporary removal of regimental medical officers, for civil or staff employ in India, would tend to render them unfit for the strict performance of the arduous duties which would again devolve upon them, and now more than ever, in consequence of the system of continuous military training and deportment enforced under the present stipulations of the Army Medical Department. In these objections Sir C. Wood did not concur, but nevertheless gave up the scheme of amalgamation. He next endeavoured to procure the formation of *medical staff corps* for each Presidency, by offering inducements to members of the British Medical Service to volunteer for Indian local duty; thus hoping to provide for India the very same class of men who would be serving in the British Army. In this design he intimated that he was thwarted by an adverse decision of Parliament. Our readers, however, will remember that the condemnation of the Indian Secretary's plan of obtaining recruits for the Indian service, and the commendation of the adverse vote of the House of Commons in the last session, were all but universal. Hence it has been found necessary to

revert to the system of an entirely *separate service* for India, as heretofore; and Sir C. Wood's Department have for some time been engaged in working out the details of the measure now before us, and forwarded to India, to be carried out without delay.

We cannot but think that the Indian Secretary must mean well to the Indian Medical Service. He can have no object in lowering the status of our profession, or in introducing an inferior class of men to serve under him, and to help to maintain the gigantic but somewhat unwieldy structure committed to his care. He intimates that the measures to be now carried out will entail considerable expense; and we trust that a further examination of this scheme will confirm the impression which a perusal of this dispatch is calculated to convey to the minds of our readers, that they will "tend greatly to improve the condition and prospects of the Medical Service in India." The duties of the superior officers, the inspectors-general and deputy inspectors-general, of the two services, are to be, for the future, kept wholly distinct. The Indian medical officers will be ineligible for the greater number, if not all, of the charges of European troops, as at present. This will render it unnecessary to keep up so large an establishment, and measures will be taken for its reduction. Assistant-surgeons are to be promoted to the rank of surgeon after a service of twelve years—a period, in our opinion, twice as long as is desirable. All officers hitherto receiving staff salaries are to suffer no diminution of their pay. Prospectively, pay and staff allowances are to be received in a "consolidated" form. A great part of the dispatch is taken up with orders relating to the amounts and modes of pay and allowances to be hereafter drawn by the several grades of the Department. Without at present doing much more than refer to the details in the dispatch, we may say that officers of all grades will have always as much and sometimes more pay than the corresponding grades in the British Medical Service. The pay for assistant-surgeons, as for the higher grades, will be ample, as far as we can at present judge. There is increase made to the pay of all grades while *unemployed*; that is, while they are on sick or private leave. This is calculated to remove a hardship which has long pressed upon all grades of the service. Hitherto, when a medical officer became, from wounds, from illness contracted on service, or from any other cause, incapacitated for the performance of his duties, he was put upon starvation allowances; his pay simple was totally inadequate for his support in India or in Europe. The retiring-pensions seem to be fixed at a fair and reasonable amount—certainly not more than sufficient to compensate for continuous residence in a tropical climate.

The mode of tenure of the higher administrative grades is to be assimilated to that in force in the

British army. Some concessions are at length made, in the repeal of antiquated restrictions, with the view of remedying what Sir C. Wood considers as very decided grievances hitherto endured by certain branches of the Department. The medical officers are to receive royal commissions conferring rank in all parts of the world; but service will not be required of them out of India. *The Royal Government guarantees all the advantages accruing to the present subscribers to the Medical Retiring and other Funds.* For the future, men appointed will not be called upon to subscribe to any funds; and this must be considered, we fear, as anything but a boon; for, hitherto, the mode of collection of the subscriptions, and the assistance rendered by Government, have rendered the Indian Military and Medical Funds one powerful source of attraction for the medical aspirant. Provision, to a certain extent, will be made, however, for the widows and orphans of those members of the service who will enter hereafter.

We suspect that the Indian Government could not well afford to do more in the way of pay; but we do not see why their medical and other officers should not be allowed to keep up, with some support (as hitherto) from Government, their Retiring Widows and Orphans Funds. We may feel some confidence on one point that, in place of an over-ruling Horse Guards influence, the Indian Medical Service will, in all probability, be superintended by an enlightened Viceroy and subordinate ruling authorities.

This document, or warrant, is, in fact, a reconstruction of the late Warrant of May 1864. Sir C. Wood could not face the storm which that warrant had excited, and he has wisely succumbed. He has listened to reason, or to universal discontent, and has now done something like justice. His present measure, after his late one, will be received with surprise and satisfaction by those most interested in its contents.

We may fairly surmise that the clauses of this order will throw a completely new face over the Indian Medical Service in the eyes of the profession. We hail the change, not only from its own intrinsic merits, but as a proof that justice to the medical officers of the royal army and navy cannot be far off or long delayed. It is impossible that so large a share of it should be dealt out to one branch of the service and held back from the other. Sir C. Wood admits that he has been beaten from his own views by the opinions of Earl de Grey. We may, therefore, fairly conjecture that the action taken by the British Medical Association has, through the influence exercised by it on Earl de Grey, done not a little towards bringing about this desirable conclusion; and may most reasonably hope that it will have also paved the way for good things to come to the medical department of the royal army and navy.

### A "SILENT FRIEND" SILENCED.

NOVEL-WRITERS of the new sensation school have not been very scrupulous in their resort to the catalogue of crimes; but they have found or invented no more odious character than that of a man who, possessing some fatal secret of another's life, uses it to extort money or gain other sinister ends. Not only is it robbery commonly pushed to a ruinous extent, but the wretched victim is reduced to a condition of complete moral slavery, and subjected to increasing mental torture, which no corporeal infliction can adequately represent. When this fatal secret has been revealed in confidence, universally regarded as sacred—when the confidence has been invited by promises of relief—and when the guilt and shame are imaginary, and the consequences of exposure studiously exaggerated—the crime surely has received all the aggravations of which it is capable; yet villains in the constant practice of this crime in its most repulsive form, and with all its aggravations, walk our streets daily; their haunts are known; their *modus operandi* is thoroughly understood; their practices have been repeatedly exposed; still not only do they escape justice, but, to a certain extent, they escape censure. The public press—our newspapers, the boasted guardians of public interests and public morals—with a few honourable exceptions, instead of denouncing the crime, consent to share in its proceeds, aid and abet it, and become the accomplices and accessories, active and passive, of the perpetrators. We refer, of course, to the advertising quacks—the “silent friends”—the “restorers of manly vigour”—who prey on the public with impunity. Now and then, however, one of them falls within the grasp of the law; and this has just happened to Dr. Henery, *alias* Wray, of 52, Dorset Street, Portman Square, and a confederate named Anderson, *alias* Wilson, who have just met with their deserts, or with something approaching thereto. At the Central Criminal Court, on the 24th ult., John Osterfield Ray, or Wray, and William Anderson, “respectably dressed men”, were indicted with having sent a letter to Captain M. A. Clarke, demanding £150 from him, with menaces. Our readers are already familiar with the facts of the case.

“Mr. Baron BRAMWELL, in summing up, called the attention of the jury to the letter written by Anderson to Captain Clarke on the 5th of October, from Warburton's Hotel, Newport, and which he described to be clearly an attempt to extort money by threats of exposure. Now, the question was, in what way did the prosecution connect the other prisoner, Wray or Henery, with this threat made by Anderson, so as to constitute the offence of conspiracy? There was the letter of the 26th of September from Henery to Captain Clarke, in which he referred to Anderson's having called upon the prosecutor and demanded £150 as being due to him (Henery); and then in the same letter he informed the prosecutor that his claim on him was for £150. Then came the letter of the



30th of September, addressed to Henery by the solicitor of Captain Clarke, and the receipt of which was acknowledged, not by Henery, but by Anderson, in his letter of the 5th of October; thus showing that there must have been some communication between the two on the subject of the demand made upon Captain Clarke. If the jury were satisfied that there was an intent to extort money by means of threats, and that that intent existed not only in the mind of one of the prisoners, but in the minds of both, that they were engaged in league together in that common intent, that would amount to a conspiracy, and the prosecutor had made out his case. If they were not so satisfied, they would acquit them; but it would certainly be a very singular thing if two people could be found acting in the way in which the prisoners had been acting without some common purpose.—The jury, after a few minutes' deliberation, returned a verdict of *Guilty* against both prisoners.—Mr. Baron BRAMWELL, in passing sentence, said the offence of which they had been convicted was one of the most abominable that could be conceived, because, in a case of this description, it was not one robbery that was practised upon the individual who was the subject of it, but that was followed up by a succession of demands, until his life was made positively hateful to him. The offence of which they had been found guilty being one of misdemeanour, he could not sentence them to more than two years' imprisonment; and he sentenced each of them to be imprisoned for that term accordingly, with hard labour."

We cannot but rejoice that any of these mischievous individuals should meet with the reward due to their crimes; but we much fear the present culprits are by no means the cleverest, or most successful, or most dangerous of their class. At any rate, they are only two out of many; and, much as the medical profession is concerned in purging itself of these disreputable parasites which cling around it, the general public is infinitely more interested in their extirpation. For one exposure, how many victims are there? For one victim actually snared, how many minds are poisoned, how many young imaginations tainted, by their vile publications? The profession has spoken loudly on this subject before; it is time that the public, in its own interest, should take it up; and, above all, time that the press, which denounces these villanies in such pungent language, should show to the world that its preaching is not deceit or humbug, by ceasing to participate in the profits of the villains. It is the newspapers which spread the fame or infame of these people all over the world, by the insertion in them of their beastly advertisements. The very day on which the *Daily Telegraph* dealt out double-distilled sensational morality in this very case, a number of the aforesaid advertisements were to be read in its columns.

ST. THOMAS'S HOSPITAL appears to be, at length, fairly out of Chancery. The decision arrived at in that court last week leaves the Governors at liberty at once to obtain possession of, and commence building operations on, the Stangate site.

It must not be supposed, because no new warrant has yet been issued, or any Horse Guards order, in favour of the army medical officer, that the movement lately initiated by the British Medical Association in behalf of the army medical officers has been without effect. The new manner of conducting the "marking" of prisoners, and, above all, the new Indian Medical Warrant, are a sure indication of the way the wind at present blows, of the benefits of that movement. The Horse Guards has its momentary triumph, there can be no doubt, in the number of candidates who have lately presented themselves for examination for the army service. The Duke, indeed, a few weeks ago, congratulated the gentlemen at Netley on the moral courage they had shown in facing the examination after all that had been said and published against the medical service of the army. The Duke, however, knows perfectly well that the gentlemen in question were, as regards professional knowledge, not of a class which could enter the first class of examination. And he also knows that, although he may be contented with third class men, there is a Parliament over his head which may hold a different opinion. On the same occasion, the Duke again repeated what he has so often said before, and what contains within it one of the most essential grievances of the army medical officer. Let the doctor, he says, only make himself agreeable, and behave well in his regiment, and he is sure to be respected and treated properly. Herein lies one great part of the evil. The medical officer has no distinct rank and social position in his regiment, as every other officer has. He is always at the mercy of his commanding officer. What would the colonel or the captain say, if they were told by the Duke: "Only you behave properly, and conduct yourself well, and you will be esteemed in your regiment, and shall enjoy all the privileges of your rank." Quite different is the position of the combatant officer; he has a regular defined position and regular defined rank in the regiment. The non-combatant's—the medical officer's—position and rank are not defined. He has to fight for his rank and position. His social standing is in the hands of his commanding officer. His rank is nominal only. He has not that support from rank which other army officers have. The late munificence of his Royal Highness towards our medical (non-combatant) brethren in the army, however, we regard as a manifest proof of benefits gained, and gained through the action initiated by the British Medical Association in favour of the army medical officer. But the Duke must open his hand still wider than he has done. We will venture to say, that it is not even in his power to resist effectually the just, the manifestly most just, demands of the army medical officer. One of two things. Either the army medical officer must cease to be a soldier—must, in fact, be reduced to the

position of the Director-General's corps of "acting assistants"; or, they must have, in reality and not in name, the rights and privileges due to their relative rank in their regiment.

DR. NICHOLLS, medical officer of the Longford Poor-law Union, in his medical report, makes the following statement.

"I beg further to state that this hospital is conducted on vegetarian and temperance principles; not one pound of flesh meat, pint of whisky, or bottle of wine, having been used in it for the last fifteen years, long experience having satisfied me that animal food, wine, brandy, etc., require to be given with great caution; indeed, I have seen sad results from their use."

Thereupon, Dr. Kennedy of Dublin very naturally asks for more specific details as to Dr. Nicholls's method of treating fever.

"Independent" (he writes) "of the medical aspect of the question, it is a most important one in another point of view—that of economy. The maintenance of a fever hospital is known to be very expensive; and if Dr. Nicholls has succeeded in treating typhus fever successfully by vegetables, to the exclusion of wine and the products of animal food, he will indeed have conferred a great boon on the community; at least, when he makes his plan known, and it has been tested and not found wanting by other physicians."

Assuredly, in the hospital of the Longford Union, there has been carried on for the last fifteen years, according to Dr. Nicholls's report, an experiment of the most important character. Our Irish brethren should take the occasion thus afforded them of solving a most difficult problem—the proper use of meat and stimulants in fevers, etc. If the records of the Longford Hospital have been carefully correct, and Dr. Nicholls's report is to be taken *au pied de la lettre*, they contain as valuable an amount of information as could be found in the records of any hospital in this country on the subject of the treatment of diseases. Our Poor-law authorities, on behalf of the pockets of the ratepayers, should send a commission to investigate the aforesaid records. Somerset House might well erect a statue to Dr. Nicholls, if he can only persuade the profession that the paupers, etc., of the country are better treated without meat and wine than with meat and wine when suffering from fever, etc.

THE *Times* has made an urgent appeal to the press of the country *à propos* of the case of Henery and Co. It calls upon them to give up admitting into their pages the advertisements of such filthy scoundrels. It tells them, in distinct language, that they encourage the scoundrelism, and participate in its profits, by publishing their lying statements; and hints, in the strongest way, that, if it were not for the press, such species of rascality could not flourish.

"We appeal to the press to consider whether it is not disgraceful to promote the ends of these wretches

by publishing their advertisements. It is impossible to plead that these advertisements are inserted in ignorance of their meaning. In the best conducted and most costly papers, as well as in the least respectable, may be seen these vile baits. These advertisements are the very instruments by which this infamous business is carried on. It is solely through the allurements held out in them, that persons are induced to avoid a regular practitioner in the vain hope of a speedy and secret treatment. If our contemporaries would resolutely exclude from their columns any advertisements of this nature, they would strike at the very root of this infamous trade, and prevent an incalculable amount of moral corruption. But there are other ways of advertising, which are equally, if not more, pernicious. There are institutions in the metropolis which, under different names, are filled with the most disgusting representations. These places are advertised in every thoroughfare of London by the gratuitous distribution of papers. It is hard to believe that powers do not already exist to put down such exhibitions. The police have large powers under Lord Campbell's Act; and it might be considered whether the term 'pictures, drawings, or other representations,' would not include the models exhibited in these places. But, at all events, if no existing Act is ample enough to meet the case, there never was more urgent need of some extension of the law. It is idle to prohibit indecent pictures and prints, as was done by Lord Campbell's Act, if representations infinitely more offensive to public morality are to be passed over. We are satisfied that we shall be supported by the whole medical profession in saying that no useful end whatever is answered by the institutions we are denouncing. In fact, the medical journals have for years endeavoured to put them down. Probably, none but medical men are fully aware of the magnitude of the evil; but we believe it is serious enough to demand the most prompt and vigorous measures."

THE editor of the *Vienna Medical Journal*, Dr. Wittelshöfer, having exposed the bad management of a prison hospital, which was under the charge of a religious sisterhood, trod upon the toes of the government, and has been (in the opinion of almost every one) unjustly condemned to a month's imprisonment and a small pecuniary fine. He says, in his journal:

"Dr. Wittelshöfer cannot resist the impulse of thanking, from his heart, both his professional and journalistic brethren, as well as friends in all classes of society, far and near, for the many proofs which they have given him of their warmest sympathy. To all he begs to offer his best and deepest thanks."

The Minister of Public Instruction in France assisted this year at the opening of the Medical Faculty. In Spain, the Minister Galiano presided at the meeting of the University of Madrid on October 1st. At Lisbon, the King himself assisted at the annual inauguration, and distributed prizes to the students.

"The students" (he said, in his address to them) "of the Lisbon Medico-Chirurgical School will assuredly always be devoted and industrious labourers in this crusade of civilisation; at once rendering their own names honoured, and extending the reputation of their *alma mater*."



## THE INDIAN MEDICAL SERVICE.

SIR C. Wood has forwarded to the Governor-General of India a despatch of the highest importance to the Indian medical service. It runs as follows:—

India Office, London, November 7th, 1864.

*To His Excellency the Right Honourable the Governor-General of India in Council.*

SIR,—Para. 1. In continuation of my despatch, No. 152, dated May 16th, 1864, and with reference to your reply thereto, No. 242, of June 29th, 1864, I have now the honour to communicate to your Excellency the decision at which her Majesty's Government has arrived regarding the future establishment of medical officers for service in India.

2. In a despatch, No. 82, dated March 12th, 1862, the late Governor-General in Council recommended the formation of an amalgamated medical service for the united army of Great Britain and India, and expressed his concurrence generally in a scheme for carrying out such a measure, embodied in a memorandum by Colonel Norman which accompanied that despatch.

3. A very important feature in the working of that scheme was the unavoidable removal of medical officers from employment in India after a limited number of years' service in that country, whatever their employment might be.

4. I was apprehensive that this might be attended with serious inconvenience; but, after much and careful consideration of the subject, I resolved to submit the proposal, with some slight modifications, for the concurrence of the Secretary of State for War.

5. I forward for your information the correspondence which has taken place upon the subject, by which your Excellency will perceive that Earl de Grey objects to the scheme mainly on the following grounds:—

1st. That the employment of British medical officers for limited periods in civil situations in India would put a stop to the continuous military training secured under the present system of the army medical department, and considered by him to be essential to the efficiency of the service; that officers so employed might acquire habits of independence inconsistent with a due performance of regimental duties, and would have to return to a regiment at an age when men in general do not easily bend themselves to the practice of subordination required from a regimental officer of inferior rank.

2nd. His time, it is stated, would have been spent in treating diseases different to a great extent from those of soldiers, and he would have acquired no experience, and have had no occasion to practise that most important part of his duty as an army medical officer, the prevention of disease. He would, in short, not be the officer whom the existing organisation of the medical department of the British army contemplated, and whom it is the object of the costly and elaborate system recently established to provide for the army.

3rd. Earl de Grey further objects, that "regimental duties with native troops are at present of a very different nature from those required in British regiments, and would not afford medical officers the training and experience which the new organisation has rendered essential;" and lastly, his Lordship observes, that if the amalgamation were once carried out on these principles, it would be extremely difficult, if not impossible, to abandon them hereafter, whatever might be the result.

6. In my reply, I explained to Earl de Grey and

Ripon my reasons for not being able to concur in the objections offered by his Lordship; but as I felt satisfied that those objections had not been lightly entertained, I felt that it would be useless to press a reconsideration of the subject.

7. It was further obvious from the correspondence that any plan involving the withdrawal for a time from their regular duty of the officers of the army medical department, would be liable to objection on similar grounds, and her Majesty's Government directed their attention therefore to the possibility of providing for the future demands of the Government of India by the formation of medical staff corps for each Presidency.

8. In order to obtain for the medical service in India the advantage of having its officers drawn from the same source, and having passed the same examination as those of the British army, and with a view of placing them on a footing of perfect equality, by obliterating as much as possible all distinction between the bodies of officers so employed and those of the British army, it was proposed to form the several staff corps by means of medical officers of her Majesty's service volunteering to join them.

9. With this view, however, it became necessary to obtain the sanction of Parliament to the repeal of that part of the Act of the 16 and 17 of Victoria, cap. clv., sec. 37, which prescribes the manner in which medical officers shall be provided for employment under the Government of India.

10. Her Majesty's Government having failed to obtain the consent of Parliament to a measure proposed with this view, it became necessary to give up the scheme of a medical staff corps, as proposed, and to revert again to the system of an entirely separate service as heretofore.

11. The changes which have been recently made in the amount and composition of the military force in India, the transfer of the whole of the European troops to the British army, and the reduction of the native force, render necessary a corresponding reduction in the establishment of medical officers serving under the local governments, as well as some change in the nature of their employment.

12. One of the objects aimed at in the contemplated union of the British and Indian medical service was the abolition of the double administrative staff in India. This advantage would have been unattainable on the formation of medical staff corps, and is equally so in the continuance of a separate service as now proposed.

13. It is obvious that a single medical staff for all India is only compatible with one amalgamated medical service, and that the objections advanced by the Secretary of State for War, and which have proved fatal to the scheme of amalgamation, must apply with even greater force to any plan that would involve the indiscriminate employment of officers from either service in the supervision of both.

14. The evils that have resulted up to the present time from the employment of a double staff will, it is believed, disappear when the duties of the officers of the two services shall have been entirely separated. The sole objection to such double staff will then consist in its expense. This, I apprehend, will, on a readjustment of the local department of inspection, with a view of meeting the altered condition of the service, be found susceptible of considerable reduction.

15. Her Majesty's Government have therefore determined that the duties of the medical officers of the British army serving in India shall in future be kept wholly distinct from those of the medical officers of the Indian establishment, and that there shall be a separate administrative establishment for each.

16. Under these circumstances, it will be necessary that the administrative establishments in the several Presidencies should be revised, and the duties of the several medical officers of the higher grades redistributed, and I request that you will take the subject into early consideration, with a view of determining the number of inspectors-general and deputy-inspectors-general of each service that will be required to conduct the administrative duties of the respective services in each Presidency.

17. In my despatch, No. 152, I authorised your augmenting the number of officers above the rank of assistant-surgeon in Bengal to 152, Madras to 86, Bombay to 69, leaving the aggregate establishment of medical officers in each Presidency the same as before.

18. That establishment is at present as follows:—Bengal, 425; Madras, 243; Bombay, 193.

19. You were informed, in my despatch, No. 291, dated August 8th, 1863, that the War Office would take measures for relieving, as soon as possible, the assistant-surgeons of the Indian army from the brigades of artillery and new line regiments, and the same course will hereafter be adopted as a necessary consequence of the transfer of those regiments to the British army, in regard to the surgeons. A reduction in the establishment of medical officers required for service in India will necessarily follow, and I request that the subject of the number likely to be required henceforward in the several Presidencies may receive your early consideration.

20. In making this calculation, you will, of course, take into account the several situations which may be properly filled up by uncovenanted members of the medical profession.

21. It is believed that, in consequence of all appointments to the local service having ceased during the last three years, the aggregate number of medical officers at present borne on the strength of the several Presidencies will be, if anything, below the prospective wants of the service, but I shall make arrangements without delay for filling up vacancies as they may occur on your revised establishment.

22. The promotion of assistant-surgeons who may hereafter enter the Indian army will be regulated by length of service, and not, as heretofore, by succession to vacancies in a fixed establishment of officers of the higher grades.

23. Assistant-surgeons of twelve years' service from the date of first commission (of which two years shall have been passed in charge of a native regiment), who shall have passed the prescribed examination in professional subjects, will be promoted to the rank of surgeon.

24. The benefit of this rule is to be extended to all assistant-surgeons now in the Indian service, but officers now in the service who may be so promoted will be considered supernumeraries to the establishment of surgeons as recently laid down, so that no promotion by seniority will take place until such supernumeraries are absorbed.

25. You will make the promotions consequent upon this concession from the date of receipt of this despatch.

26. In the despatch above referred to, I informed you that you were authorised to introduce certain changes in the mode of payment of officers of the medical department serving in India, and you were informed that, pending a further communication upon the subject, officers of the British or Indian medical service, holding staff appointments, the salaries of which are consolidated, will continue to draw their salaries as at present; and all officers of the Indian medical department in the receipt of staff salaries, including such as are in medical charge of native regi-

ments, will continue to draw the aggregate amount of pay and staff allowances they now receive, provided it be not less than the rate of pay laid down in the above table for officers of their rank and standing in the service.

27. I have now to inform you that it has been determined that in future all employment on the part of medical officers of the Indian service involving the receipt of special staff salary shall be considered as staff employment, the salaries being in all cases consolidated; and that all appointments, whether civil or military, held in future by officers of the present Indian medical service below the rank of deputy inspector-general, will be alike tenable by surgeon-majors, surgeons, and assistant-surgeons.

28. The salaries of the principal administrative and military appointments are fixed at the following consolidated sums:—Inspector-general, 2500 rs., deputy inspector-general, 1800 rs., whether of the British or Indian medical service; surgeon-major in charge of native regiments, 1000 rs., with 90 rs. for horse allowance in cavalry regiments; surgeon in charge of ditto, 800 rs., with 90 rs. ditto; assistant-surgeon about five years' full pay service ditto, 600 rs., with 60 rs.; assistant-surgeon under five years' ditto, 450 rs., with 70 rs. ditto. But officers now in the Indian service will receive the pay due to their rank as laid down in para. 10 of my despatch, No. 152, of May 16th, 1864, when such pay is in excess of the consolidated salaries above mentioned.

29. Officers who may hereafter be appointed to the Indian medical service will receive pay when unemployed in India according to the following scale:—

| Rank.                   | Years' Service. | Unemployed Pay.<br>R. A. P. |
|-------------------------|-----------------|-----------------------------|
| Surgeon-major . . .     | 25 . . .        | 888 12 0                    |
| Ditto . . .             | 20 . . .        | 852 3 7                     |
| Surgeon . . .           | 15 . . .        | 677 6 11                    |
| Ditto . . .             | 12 . . .        | 640 14 6                    |
| Assistant-surgeon . . . | 10 . . .        | 410 9 5                     |
| Ditto . . .             | 6 . . .         | 392 5 2                     |
| Ditto . . .             | 5 . . .         | 304 14 2                    |
| Ditto . . .             | under 5 . . .   | 286 10 0                    |

30. The salaries of other medical appointments in the civil and military departments will be revised with reference to the above, and fixed at a consolidated sum; and I request that a report may be made to me upon the subject with as little delay as possible. In the meantime, the aggregate sums at present received in each case will continue to be drawn.

31. With a view of promoting the efficiency of the service, it has been further determined that the tenure of office by a deputy inspector-general of the Indian service shall, as in the case of inspectors-general, be limited to five years; officers being, however, if not disqualified by age, eligible either for employment in a second tour of duty in the same grade, or for employment in the higher grade of inspector-general by promotion thereto.

32. You will follow, in the cases of officers now holding the office of deputy inspector-general, the same course which your Government adopted in 1861, in regard to combatant officers holding certain staff appointments, and permit all such to hold their offices for two years longer, irrespective of the periods they may severally have served in them. Should any officer have served up to the present time less than five years, he will be allowed to complete a full period of seven years.

33. The rank of inspector-general and deputy inspector-general conferred upon officers of the Indian medical service under the Royal Warrant of the 13th January, 1860, is to be considered as substantive rank. These officers, on vacating office at the expir-



ation of the five years' tour of duty, will be permitted in future to draw respectively an unemployed salary of 1200 rupees *per mensem* in the former, and 900 rupees in the latter case, for a period of six months from the date of their vacating office; after which they will be placed, while unemployed, on the rate of pay laid down in my despatch of the 16th May, 1864, for officers of corresponding rank in Europe. These sums, deducted from the consolidated salary, will regulate the moiety of staff salary to be drawn by officers of those grades during absence on sick certificate. The decision reported in the third paragraph of your letter No. 242 of 1864 will cease to operate from the date of publication of the present despatch.

34. With a view to improving the position and prospects of officers of the Indian medical service, it has been resolved to introduce prospectively the following revised pension rules.

35. Officers of the Indian medical service will be allowed to retire on the following scale of pension, on completion of the required periods of service.

|  |      |
|--|------|
| After 30 years' service in India . . . | £550 |
| " 27 " " " . . .                       | 456  |
| " 24 " " " . . .                       | 365  |
| " 21 " " " . . .                       | 292  |
| " 17 " " " . . .                       | 220  |

36. An inspector-general, after five years' active employment in India in that grade, will be entitled to retire upon a pension of £350 *per annum*, in addition to that to which he may be entitled under the above scale.

37. A deputy inspector-general will, after five years' active employment in India in that grade, be entitled to retire upon a pension of £250 *per annum*, in addition to the pension to which he may be entitled under the above scale.

38. In each of the above cases, six months' absence on medical certificate will be allowed to count towards actual service in those grades.

39. Officers now in the Indian medical service will, on retirement, have the option of pension according to the above rules, or according to those now in force.

40. My attention has been directed on this occasion to the rule regarding the qualification of an assistant-surgeon for promotion to the rank of surgeon required under Clause 3 of the Royal Warrant dated 13th January, 1860. There can be no doubt that this rule, which has been again brought to notice by a recent despatch from your government, requiring a service of two years in or with a regiment, bears very hardly on many officers, the nature of whose employment precludes their showing the required qualification, and who, on entering the service, had no reason to suppose that such a regulation would be adopted.

41. These considerations have induced me to consent to exempt from the operation of the clause of the Royal Warrant all the assistant-surgeons who entered the service prior to its date. It is to be understood, however, that the rule is to be strictly enforced in the case of all medical officers who entered the service after January 1860.

42. In my despatch, No. 152, of 16th May, 1864, par. 7, I informed you that her Majesty's Government had determined to modify the instructions given in my despatches of the 31st October, 1860, and 30th September, 1861, and to permit the period of service qualifying surgeons for the rank of surgeon-major, under that Warrant, to be calculated from date of first commission, including all leave of absence of whatever kind.

43. I have now to inform you that the same principle is to be observed with respect to the grant of honorary rank on retirement, under Clause 14 of the Royal Warrant, and that the twenty-five years' service qualifying for a step of honorary rank, the re-

quirements of the clause in other respects being fulfilled, shall be inclusive of all leave of absence.

44. I have further to inform you, that it has been determined, as in the case of combatant officers of the Indian army, to confer upon the medical officers of that service royal commissions, in substitution for those which they now hold, conferring rank in her Majesty's service in any part of the world. The medical officers of her Majesty's Indian service will not, however, be required to serve out of India, except with their own consent.

45. I have, lastly, to inform your excellency, that assistant-surgeons appointed to her Majesty's Indian service in future will not be called upon to become subscribers to any military or medical funds; and that her Majesty's Government have determined to guarantee to present incumbents on and subscribers to the several medical funds, the annuities and pensions to which they are, or to which they, their widows and children, may become, entitled from those funds, according to the regulations now in force, and at the present rates of subscription. But this guarantee must be regarded as conditional on the absolute transfer of the assets of the fund to the Government, and must not be construed as conveying to any fund, or to any member of it, benefits which are not actually provided for in the regulations as at present in force.

46. The widows and children of medical officers hereafter appointed to her Majesty's Indian service will be granted pensions not less than those to which they would be entitled under the provisions of the Royal Warrant of June 15th, 1855.

47. The above measures, which obviously tend greatly to improve the condition and prospects of the medical service in India, cannot be carried out, as your government will at once perceive, without a heavy expense to the state. It is hoped, however, that the result will be at once to diffuse a spirit of satisfaction and contentment among the officers now in the service, and to secure for the future a certain supply of medical officers of good social position, liberal education, and professional ability, for her Majesty's service in India.

I have the honour to be, sir,

Your most obedient, humble servant,

(Signed)

CHARLES WOOD.

THE INDIAN ARMY MEDICAL SERVICE. The highest honours are liberally promised in the Royal Warrant, but they have been woefully forgotten in times past. The following table shows how the military medical service has fared at the hands of the authorities in this respect :—

#### Military Honours and Distinction.

| Combatant Officers.   | British Service. | Indian Service. |
|-----------------------|------------------|-----------------|
| The Garter . . . 7    | None . . .       | None.           |
| The Thistle . . . 1   | None . . .       | None.           |
| St. Patrick . . . 3   | None . . .       | None.           |
| Star of India . . . 5 | None . . .       | None.           |
| Grand Cross . . . 22  | None . . .       | None.           |
| K.C.B. . . . 91       | None . . .       | None.           |
| C.B. . . . 387        | 11 . . .         | 6.              |

These six companions of the bath are distributed among 788 Indian medical officers; of these, two belong to each of the three presidencies. When we call to mind the many surgeons who passed through the Cabul, the Scinde, the Gwalior, the first and second Sikh campaigns, the Persian campaign, the mutinies, two China campaigns, the last year's "little war" on the heights of Umbeyla, besides a host of minor engagements on the frontiers of India, we cannot but think that the number of honorary distinctions has been miserably few. (*Friend of India.*)

## Association Intelligence.

### SOUTH-WESTERN BRANCH.

*Medical Provident Fund.* At a recent meeting of the Council of this Branch, Dr. C. RADCLYFFE HALL (Torquay) and Dr. THOMAS LITTLETON (Saltash) were elected Directors of the Medical Provident Fund, in the room of Dr. Cookworthy and P. C. De la Garde, Esq.

### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

A MEETING was held at the Fountain Hotel, Canterbury, on November 17th, at 3 P.M. The following papers were read.

1. The Relative Frequency and Duration of Epidemics of Different Diseases during the last Twenty-seven Years, as observed in Canterbury. By G. Rigden, Esq.
2. Double Vagina obstructing Delivery: Operation. By R. Tassell, M.D.
3. Case of Heart-Disease. By W. Sankey, Esq.
4. Diet after Delivery. By W. Sankey, Esq.
5. Induction of Premature Labour. A Forceps Case. By R. L. Bowles, Esq.

## Reports of Societies.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 8TH, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

ON THE NERVOUS STRUCTURES AND THE ACTION OF THE HEART. BY ROBERT LEE, M.D., F.R.S.

GALEN affirmed that the heart has no nerves, and that it is not a muscular organ. Vesalius, Realdus Columbus, and Cæsalpinus adopted these opinions. The cause of the motion of the heart, or the source of its sensitive and contractile power, has engaged the attention of the most profound anatomists and physiologists ever since the discovery of the circulation of the blood. Harvey considered the motion of the heart to be muscular. Three years after the death of Harvey the Royal Society was constituted by Charles II a corporate body, "for the promoting of the knowledge of natural things and useful arts by experiments, to the glory of God and the good of mankind." Anatomy and physiology were then considered two of the most important branches of knowledge to which the fellows could direct their attention, and at no period since have they ceased to be viewed in the same light. The doctrine of the circulation of the blood was then almost universally admitted, but the cause of the action of the heart had not been discovered by Harvey; and during the last two centuries the most eminent medical philosophers have been engaged in the investigation of the subject, and the *Transactions* of the Royal Society of London have contained the results of their most important researches.

In 1670, a paper by the Hon. Robert Boyle, entitled, "On the Motion of the Separated Heart of a Cold Animal in the Exhausted Receiver," was published in vols. iv and v.

An analysis of Dr. Lower's treatise, *De Corde: item de Motu et Colore Sanguinis*, etc., was published

in 1669. A Discourse by Dr. Drake concerning some Influence of Respiration on the Motion of the Heart was published in vol. xxiii. A Discourse on the Power of the Heart, addressed to Dr. Meade by Dr. Jurine, was published in vol. xxx, and a letter in defence of the Doctrine of the Power of the Heart against the objections of Dr. Keil. Vol. xli contains a short account of Dr. A. Stewart's paper concerning the Muscular Structure of the Heart. Dr. Mortimer Borelli computed the motive power of the heart to be equal to 3,000 pounds.

It is impossible, said the author, to tell how many Croonian Lectures have been read before the Royal Society on muscular motion and the heart's action. Mr. J. Hunter read six between 1776 and 1782. In 1790 one was read by Sir Gilbert Blane, and twelve by Sir Everard Home between 1795 and 1828, and two by Sir A. Carlisle in 1806 and 1808. In 1808 one was read by Dr. Thomas Young; in 1811 one by Mr. B. C. Brodie. Le Gallois' work was published in 1815, and the same year a paper was published in the *Philosophical Transactions* by Dr. Wilson Philip, entitled, "Experiments made with a view to ascertain the Principle upon which the Action of the Heart depends, and the Relations which subsist between that Organ and the Nervous System." In 1815 a paper was published by Mr. Clift, entitled, "Experiments to ascertain the Influence of the Spinal Cord on the Action of the Heart in Fishes."

After all these elaborate researches had been made, the cause of the heart's action, one of the most difficult problems in physiology, remained unsolved. It did not appear that any of these anatomists and physiologists made an attempt to discover to what an extent the heart is endowed with nervous structures, and whether the action of the heart could not be referred to the influence of these structures, independent of the brain and spinal cord. Haller, Wurberg, Sömmering, and other anatomists who lived about the middle and towards the close of the last century, affirmed that the action of the heart did not depend upon nervous influence, but an unknown hypothetical principle which they called irritability. This, they said, was the cause of muscular action in all parts of the body.

In 1791 or 1792, B. J. Behrends, a pupil of Professor Sömmering, published a treatise, entitled, *Dissertatio Inauguralis quæ demonstratur Cor Nervis carere*.

In 1794 Scarpa's work, *Tabule Neurologicæ ad Illustrandum Historiam Anatomicam Cardiacorum*, was published. It contains four engravings of the human heart; and if these be examined it will be seen that branches of nerves have been represented accompanying the coronary arteries, as in the engraving of Behrends, but few, if any, passing into the muscular substance of the heart.

In Mr. Swan's magnificent work, published in 1830, only a few small branches of nerves have been represented, which accompany the coronary arteries, and the muscular substance of the heart is represented as almost completely destitute of nerves.

In 1839 M. Remak stated that he had discovered in the human heart small ganglia on the filaments of the cardiac nerves, as they ramify on the substance of the heart. In the engraving which accompanies M. Remak's paper, the heart is represented as almost totally destitute both of ganglia and nerves.

It is impossible to deny that at this time and in 1844 the nervous system of the heart remained undiscovered, and the cause of the heart's action unexplained. The discovery of the ganglia and nerves of the uterus on April 8th, 1838, led by an extraordinary and unexpected route to the discovery of the ganglia and nerves of the heart in September 1846, by which the problem of the heart's action was finally solved.



The author then stated the four conclusions which he was enabled to deduce from his dissections, and stated that, in compliance with the request of a member of the Council, the preparations which warranted these conclusions had been placed upon the table of the Society.

GROWTH, SPRINGING FROM THE EPIGLOTTIS, SUCCESSFULLY REMOVED WITH THE AID OF THE LARYNGOSCOPE. BY G. D. GIBB, M.D.

Although the pathology of the epiglottis has been much enriched since the revival of the laryngoscope, tumours of the cartilage were very uncommon. This was proved by inspection of the museums of London and elsewhere, together with the author's own experience. Such instances as had existed, involved the laryngeal surface of the cartilage, and were chiefly warty vegetations; and the same surface was affected by the mucous cyst in Mr. Durham's recent case. The author now contributed an instance wherein a large growth sprang from the lingual surface of the cartilage, with the object of adding to our knowledge of its pathology, aiding diagnosis, and showing what might be done under the most urgent circumstances.

The patient was a lady, aged 60, the wife of a clergyman. She had suffered from a throat-affection for two years, the symptoms simulating malignant stricture of the œsophagus, with more or less constant dysphagia and expectoration of blood and mucus, associated with severe pain. Matters had been getting worse for the last twelve months. On examination in July last, she was pale and wan, emaciated, spoke in a low, thick, guttural tone, had complete dysphagia with fluids, and could swallow a little farinaceous food or an egg. Fluids always passed through the nostrils. She had no dyspnoea unless when lying on her back at night, but never in the daytime; coughed and expectorated mucus, at times frothy or thick and stringy, and sometimes mixed with blood. With the laryngoscope, a roundish, prominent, and projecting tumour, of the size of a small walnut, was seen occupying the position of a pendent epiglottis, which, during the act of swallowing, became elevated, and could be seen by the unaided eye at the back of the mouth pressing against the pharynx. The epiglottis itself was not seen, nor the interior of the larynx; but the posterior margins of the arytenoid cartilages could be observed. It seemed as if the tumour, partly divided by an antero-posterior sulcus, grew from the lingual surface of the epiglottis. It was red and vascular in some parts, white in others, eroded, and giving rise to free expectoration of mucus and oozing of blood. Believing that the entire cartilage was involved in the disease, Dr. Gibb's intention was to remove the whole mass, including all the free portion of the epiglottis, and trust afterwards to nature to so contract the laryngeal orifice as to permit swallowing without inconvenience, as had happened to him in other cases where the free portion of the cartilage had been destroyed by ulceration. On July 7th, the thick loop of wire of an improvised *écraseur* was passed around the base of the tumour, and, on the second introduction, it was drawn home, and quickly detached the growth; and at the same instant, it was seized by Mr. Ure at the back of the mouth with vulsellum-forceps, and extracted. Chloroform was not administered, the lady having sat on a chair in front of the author, the tongue being held outwards by Dr. Logan. There was little bleeding, and it was found that the lingual surface of the epiglottis had been separated from the growth as cleanly as if dissected with a scalpel. The subsequent progress was most satisfactory; the character of the voice improved, and swallowing now became quite easy,

and has continued so to the present time, although occasionally there is a little sanguineous expectoration from the throat. The tumour was soft and spongy, and, on microscopic examination by Dr. Andrew Clark, was pronounced to be unquestionably benign, in its present condition a connective tissue, and would have become most probably a fibro-cartilaginous growth. In a general commentary upon the case, the author believed that the growth had become moveable, with a sulcus running transversely behind, which permitted of its fortunate removal without injury to the epiglottis itself.

## Correspondence.

### PERINEAL SECTION AND PUNCTURE OF THE BLADDER.

LETTER FROM THOMAS PAGET, ESQ.

SIR,—Dr. Morris has now given us, in your number of October 23rd, the result of his two cases of perineal section; and I have to congratulate him and his patients upon the attainment of the satisfactory state which, in his first report of them, he was only presuming upon.

I also grant that they compare advantageously with my own, by having no tube to wear. Those now wearing the tube, however, say that it gives them no discomfort. "Mr. N., aged 82," assured me, not a month ago, that walking three or four miles is not followed by any uneasiness; and that he believes he could extend his walk to any distance with impunity. The only disadvantage, then, of the tube, is the trouble of attending to it at micturition-times, and of changing it, if of elastic gum, or washing it, if silver, sufficiently often to prevent incrustation; and against this have to be set, as advantages, the impossibility of future harassment by reproduced stricture, and the avoidance of a more or less frequent passing of instruments as a preventive.

Dr. Morris designates perineal section as "a plain-sailing, straightforward operation, from beginning to end"; and it is thus declared to us that his cases were of the simplest kind; the stricture neither deep in the perinæum, nor occupying any considerable portion of the urethra's length; nor the perinæum affected by chronic swelling,—cases, in short, rather of urethral incision than perineal section. Would they not have been dealt with better by the lancetted stilette? As he has described the operations, their cures are surely not to be stared at as marvels.

But others are impressed with graver ideas of perineal section. They see in it an operation that has baffled, in the performance of it, the best surgical skill and anatomical knowledge; that has resulted in urinary fistula, or in death by pelvic infiltration, pyæmia, or constitutional shock. And, indeed, little do such lamentable results surprise those who are conversant with the circumstances to which the operation is more commonly confined; the stricture occupying a posterior and lengthy portion of the urethra, therefore deeply seated in the perinæum; the scrotum and perinæum swollen, perhaps, the whole way to the anus; this swelling, too, of rocky hardness, and perforated by one or more confusing fistulae. To perineal section, then, I apply, and must continue, the term "groping dissection"; and against it, as an operation in general, have to uphold puncture above the pubes, for the safety, certainty, and efficiency of which a guarantee is furnished by the experience recorded in your numbers of July 2nd, 1859, and August 20th, 1864. But surely we are satisfied as to its

safety, in spite of the prejudice against it, when we are fully impressed with the facts, that the operation is never done except when a distended bladder lifts up the peritoneum, and that the trocar is directed to be passed into the bladder by a *simple* puncture at a point not more than an inch above the pubes. Of course, too, the trocar should be retracted within its cannula when half-way across the bladder. By *simple* is meant, not hampered by previous dissection. With a three-inch incision and dissection down to the peritoneum, as directed by surgical authorities, the operation may well be deemed a dangerous course to take.

The question of emasculation can only be decided by future observation. It is not known in what proportion of cases inveterate stricture interferes with the virile function; nor how often perineal section, properly so called, leaves it intact; but it is certain that a purblind dissection deep in the perineum must be apt to involve the verumontanum vasa deferentia et vesiculæ. Perhaps their mutilation and disconnection accounts for the fact named by Mr. Pollock in his paper published by you last week; namely, that "the wound may never heal, but become fistulous, although a free and proper passage through the urethra may be restored." I claim, then, for puncture above the pubes, that, by excusing the urethra its duty in micturition for any length of time, it offers to dilatation the best opportunity of working a cure, and to stricture its best chance of being satisfactorily cured.

I have so far confined myself to matters essential to the philosophical consideration of puncture *v.* section in impracticable stricture. I have now to remind Dr. Morris of his misapprehension as to the catheter which I pointed out in his first note, and which he must have seen while reperusing my paper of 1859, yet has not acknowledged. I would also indicate to him that, in his last, he imputes to me that I have written what I know to be not correct. "No, no, Mr. Paget; you must know this 'groping dissection' is not correct." I would now suggest to him, that personal imputations are not either customary or valuable as aids in an argument.

I am, etc., THOMAS PAGET.

Leicester, November 25th, 1864.

### TREATMENT OF PARTURIENT WOMEN.

SIR.—It appears to me that the discussion upon the treatment of parturient women is assuming a different form from that which it presented at first. We do not want to know whether ergot be admissible, or when; neither would a polemical discussion as to whether or not Dame Eve's sorrows have been multiplied be quite in place in a medical journal. Parturient women of the present day are not quite so *au naturel* as our first mother was. That being admitted, then the parturient state may to a certain extent be looked upon as a disease; or rather, the condition of the patient may be regarded as one in which various diseases may readily be induced by a deviation from proper treatment. All this being granted, then let gentlemen, should any be found who may think it worth their while to prolong the discussion (for I do not) answer this. Take twenty parturient women who may have gone through their labours in every way naturally: Would it be necessary to keep such women for one week on gruel, tea and toast, and mutton-broth? or would it be, on the other hand, the more proper to see such women on the morrow after their trouble, order a mild aperient the following morning, and, after its action, gently propose a mutton-chop, with sherry and water or

glass of mild beer, as an introduction to that liberal diet peremptorily demanded by all suckling mothers? Let us have no "shunting off from the direct line", as Mr. MacCarthy hath it, but steadily observe the question in point, and answer who can.

My midwifery practice has extended to many hundreds; so I can speak practically of the above treatment as being right. I am, etc., W. A. J.

## Medical News.

UNIVERSITY OF LONDON. The following is a list of candidates who passed the late Second M.B. Examination.—Pass Examination.

### First Division.

Best, Palemon, University College  
Carter, William, Charing Cross and St. Thomas's  
Casey, Edward, King's College  
Coombs, Carey Pearce, St. Mary's Hospital  
Day, Edwin I. Inaud, King's College  
Edwards, Thomas Marsden, Andersonian Institution  
Fairbank, Thomas, St. Bartholomew's Hospital  
Fox, Edward Lloyd Harnes, University College  
Hington, Charles Albert, St. Bartholomew's Hospital  
Hooper, John Harward, St. Thomas's Hospital  
Kempthorne, Henry Law, King's College  
Ludlow, Ebenezer, St. Bartholomew's Hospital  
Maller, Richard May, B.A., University College  
Morton, John, St. Thomas's Hospital  
Nunneley, John Albert, Leeds and Guy's Hospital  
Phillips, John Jones, Guy's Hospital  
Rickards, Walter, University College  
Simms, Frederick, King's College  
Smith, William Frank, Guy's Hospital  
Wesley, John Sebastian, King's College

### Second Division.

Edis, Frederick Pooley, Westminster Hospital  
Hinds, James, Queen's College, Birmingham  
King, George, London Hospital  
Taylor, Shephard Thomas, King's College  
Willey, Henry, King's College  
Woodhouse, Thomas James, St. Thomas's Hospital

APOTHECARIES' HALL. On November 24th, the following Licentiates were admitted:—

Clark, William Falconer, Cunningham Place  
Lattey, Walter, Manor Street, Clapham  
May, Augustus Square, Plymouth  
Steele, Henry Octavius, General, Yorkshire  
Swindle, John, Appledore, Devon

At the same Court, the following passed the first examination:—

Hornie, Edward, Charing Cross Hospital  
Searle, George Clements, St. George's Hospital  
Stuart, Robert, Guy's Hospital  
Underhill, Francis William, St. George's Hospital

### APPOINTMENTS.

#### ARMY.

ALSTON, Staff-Assistant-Surgeon W. E., M.D., to be Assistant-Surgeon Royal Artillery, *vice* R. Storey.  
CULLEN, Assistant-Surgeon D., M.D., 17th Lancers, to be Assistant-Surgeon 3rd Dragoon Guards, *vice* S. A. Lithgow.  
GRANT, Staff-Assistant-Surgeon R. A. P., to be Assistant-Surgeon 43rd Foot, *vice* J. J. Henry.  
GUINNESS, Staff-Assistant-Surgeon H. C., to be Assistant-Surgeon Royal Artillery, *vice* W. Y. Jeeves.  
HENRY, Assistant-Surgeon J. J., 43rd Foot, to be Staff-Assistant-Surgeon, *vice* R. A. P. Grant.  
JEEVES, Assistant-Surgeon W. Y., Royal Artillery, to be Staff-Surgeon, *vice* A. D. Taylor, M.D.  
LITHGOW, Assistant-Surgeon S. A., 3rd Dragoon Guards, to be Assistant-Surgeon 17th Lancers, *vice* D. Cullen, M.D.  
MOFFAT, Assistant-Surgeon A., Supernumerary in 67th Foot, to be Staff-Assistant-Surgeon, *vice* J. Youell.  
MILLER, Staff-Surgeon O. B., to be Surgeon Military Train, *vice* J. A. Woolfreyes, M.D.  
STOREY, Assistant-Surgeon R., Royal Artillery, to be Staff-Assistant-Surgeon, *vice* W. E. Alston, M.D.  
WOOLFREYES, Surgeon J. A., M.D., Military Train, to be Staff-Surgeon, *vice* O. B. Miller.

#### ROYAL NAVY.

BELLAMY, George, Esq., Assistant-Surgeon, to the Victory, for Haslar Hospital.



BENNETT, William R., M.D., Assistant-Surgeon, to the *Duke of Wellington*.  
 GILMORE, Robert, Esq., Assistant-Surgeon (additional), to the *Rattlesnake*.  
 GRIGG, Joseph C., Esq., Assistant-Surgeon, to the *Victory*.  
 IRWIN, Alnauty, Esq., Surgeon, to the *Aurora*.  
 MACLAURIN, Henry N., M.D., Assistant-Surgeon, to Greenwich Hospital.  
 MILNE, Thomas, M.D., Assistant-Surgeon, to the *Jackal*.  
 ROHILLY, Michael J., Esq., Assistant-Surgeon, to the *Asia*.  
 WILLIAMS, Charles F., Esq., Assistant-Surgeon, to the *Improbable*.  
 BREND, Alfred, Esq., } Acting Assistant-Surgeons, to the  
 COWEN, Philip, Esq., } *Royal Adelaide*, for service at  
 DUCKWORTH, Dyce, M.D., } Plymouth Hospital.  
 DOYLE, Edward W., } Acting Assistant-Surgeons, to the  
 ROBERTSON, A. G., Esq., } *Victory*, for service at  
 WIMBERLEY, Conrad C., Esq., } Haslar Hospital.

#### VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

FRASER, A., M.D., to be Assistant-Surgeon 1st Aberdeenshire R.V.  
 FRYER, J., Esq., to be Hon. Assistant-Surgeon 12th Yorkshire R.V.  
 JONES, F. C., Esq., to be Surgeon 7th Surrey R.V.

#### DEATHS.

ARNOTT, John L., M.D., at Cheltenham, aged 23, on November 18.  
 CRANE. On November 21, at 29, Sussex Street, Warwick Square, Mary Ann, wife of F. C. Crane, M.D.  
 DRYLAND. On November 23, at Kettering, aged 25, Sarah Lydia, wife of J. W. Dryland, Esq.  
 HAWKINS, Frederick, M.D., at Hitchen, aged 68, on November 27.  
 KENT, Benjamin A., M.D., of Hyde, in Dover Street, Piccadilly, on November 25.  
 LANG, Jeffery, M.D., at Ippelen, Devon, aged 65, on November 12.  
 \*PARRY, Richard L., M.D., of Amlwch, Anglesea, on November 19.  
 RIDING, Roger, M.D., of 79, Kensington Gardens Square, on Nov. 19.  
 RUGG. On November 19, aged 7, Patience, daughter of G. P. Rugg, M.D., of Kennington.  
 SEWARD, Charles, Esq., Surgeon, at Littlehampton, aged 31, on November 23.  
 SHEARMAN, Charles J., M.D., at Ingatestone, Essex, aged 37, on November 16.  
 TAYLOR, John, M.D., at 222, Old Kent Road, aged 64, on Nov. 29.  
 WOOD, Charles B., Esq., Surgeon, H.M.S. *Orlando*, drowned off Tunis, on November 3.

**ROYAL COLLEGE OF SURGEONS.** A preliminary examination in general knowledge will take place at the College of Surgeons on the 20th inst. and following days.

**UNIVERSITY OF EDINBURGH.** The number of students matriculated this year is 1,359, among whom 426 are in the medical faculty. In 1863, at the corresponding period (November 23), the number of students was 1,376, of whom 446 were medical.

**LECTURESHIP ON MENTAL DISEASES.** Sir Alexander Morison, late physician to Bethlehem Hospital, has founded and endowed a lectureship on Mental Diseases in connection with the Edinburgh College of Physicians. Dr. W. Seller has been appointed the first lecturer.

**THE ROYAL SOCIETY.** The annual meeting of the Royal Society was held on Wednesday at Burlington House, Piccadilly. The chair was taken by the President, General Sabine, who delivered an address, in which he adverted to the leading scientific and geographical discoveries of the past year, paying in passing a graceful compliment to the memory of the late Captain Speke. Dr. W. A. Miller was elected treasurer for the ensuing year, and Dr. W. Sharpey and Mr. G. Stokes, M.A., secretaries. A council was elected, comprising the Earl Stanhope, Dr. T. Watson, Professor Wheatstone, D.C.L., Colonel Sir G. Everest, C.B., Dr. J. Alderson, Professor J. C. Maxwell, M.A., Professor W. Pole, C.E., the Rev. Professor R. Willis, M.A., Mr. G. Busk, Dr. J. D. Hooker, Professor H. J. S. Smith, M.A., Dr. H. Bence Jones, Professor Sylvester, M.A., and other gentlemen. The Royal and Copley medals were presented by the President to the gentlemen to whom they had been adjudged. The anniversary dinner was held at Willis's Rooms in the evening.

**BEQUESTS.** By will, Mr. S. Wilson of Norwich leaves £100 to the Whitehaven Infirmary.—The sum of £187:10 has been received by the Hospital for Diseases of the Chest, Victoria Park, from her Majesty's treasury, being part of a bequest by the late Madame de Lilly to her Majesty the Queen, for the poor of London: and the Metropolitan and Royal Free Hospitals have each received £375 from the same fund.—Mr. Hudson Gurney has left £1000 to the Norfolk and Norwich Hospital.

**NAVAL MEDICAL OFFICERS IN JAPAN.** The following notices have appeared in the late admiralty dispatches from Japan:—"The medical staff of the Royal Marines, under Dr. C. K. Ord, were most active and prompt in their attendance to the wounded."—"The medical officers, Messrs. E. A. Birch, Samuel McBean, and J. T. Comerford, assistant-surgeons, were exceedingly prompt and constant in their attention to the wounded."—"Mr. R. L. B. Head, assistant-surgeon, has been promoted to be surgeon."

**ROYAL MEDICAL BENEVOLENT COLLEGE.** The public distribution of prizes to the pupils of this establishment took place on Wednesday, November 16th, in the presence of Sir Thomas Phillips, John Probert, Esq., and other friends. Owing to an outbreak of scarlatina in the school last July, the customary anniversary of "the Founder's Day" was not observed—the youths having been sent to their homes rather precipitately, and the prizes for scholarships and good conduct then won were necessarily not presented.

**SCOTTISH REGISTRAR-GENERAL'S QUARTERLY REPORT.** The Registrar-General for Scotland for the third quarter of 1864, has to record the highest birth-rate he has ever registered in this quarter—namely, 347 (*per annum*) in every 10,000 of the estimated population—377 in the town districts and 313 in the rural; also the highest marriage-rate, 64 in every 10,000—85 in the town districts and 39 in the rural; and a death-rate of 296, which is higher than in this quarter of any of the previous years, except 1863—251 in the towns and 156 in the rural districts. The health of the population was below the average during the quarter. The increase of sickness and death seems to have been most marked in the towns. It has been noticeable in every month of the present year, and cannot be traced to any particular epidemic; there is a general increase of deaths from all diseases. The mortality has been on the increase for two or three years, and the Registrar-General considers that its probable causes merit a searching inquiry.

**DR. HENERY AND Co.** At the Marylebone Police Court, on Saturday last, a respectably-dressed man applied to Mr. Mansfield for advice. He said: "Some time ago, I saw an advertisement emanating from Dr. Henery, of Dorset Street. By it, I was induced to go to his place. Amongst other things, he said I should require a galvanic battery, for which I would have to pay two guineas. He said, when I no longer required the battery, he would return me the two guineas. I went on with this for about four months, up till May last, and finding I was deriving no benefit from the treatment, I asked for my money back. I now wish to know if I cannot recover the money." Mr. Mansfield: I see by the papers that the scoundrel is in prison, just commencing a term of two years' hard labour. When that has expired, you can sue him for the amount. Applicant: Cannot I go upon the goods at his place? Mr. Mansfield: I think not. Applicant: He has a good deal of property in Dorset Street. Sergeant White, 16 D, said that the goods were being removed out of the district of this court.

**ARMY MEDICAL SERVICE.** The next competitive examination for medical commissions in the army is announced to be held at Chelsea Hospital, on Monday, the 20th of February. Candidates are required to be between the ages of 21 and 30.

**THE SEWAGE QUESTION** begins to be agitated in Paris. There is an outcry against contaminating the Seine like the Thames. To distribute the sewage over the country is the remedy proposed; but since Paris has yet to be drained, the country must wait.

**SCIENTIFIC APPARATUS OF CELEBRATED MEN.** At a late *soirée* at the Conservatoire, amongst objects of interest exhibited, was the apparatus used by Lavoisier in effecting the synthesis of water. This has been presented to the Conservatoire by the Academy of Sciences. Is Cavendish's eudiometer still in existence, and where is it to be seen? M. Tresca thinks it a good idea to make a collection of such objects. The simple apparatus of some of the leading discoverers would look strange beside the magnificent display of apparatus which the public professors have at their disposal—paid for, however, out of the public purse. George Stephenson's "Rocket" is at South Kensington; why should they not have Cavendish's eudiometer, if they can get it; and Davy's battery, if the Royal Institution will part with it? How interesting, too, would be a sight of Wollaston's small and simple stock of apparatus. (*Chem. News.*)

**POISONING BY LEAD.** The following details were elicited at a recent inquest in Ratcliffe, on one Elizabeth Wood, aged 55, who had died in violent convulsions. The deceased, about four months ago, obtained work at a white-lead factory. She was then in good bodily health. She laboured there from six o'clock in the morning till six o'clock in the evening, and her wages for these twelve hours was 1s. 6d. Sometimes the work went on till nine o'clock, or even till eleven o'clock at night. There were about twenty women at this factory thus employed. The unfortunate woman soon fell ill, poisoned by the occupation. Her joints became weak, her body wasted, her teeth became black, and she got palsied. With the first effects she went to a doctor, who told her she must inevitably die from the lead-poisoning, unless she left the work. But, she said, she had no choice but to go on or starve. She did so; and first was unable to work on all days in the week, then could struggle only on some, and, finally, could not get to the place at all; then she was seized with convulsions, and died. The medical evidence was to the effect, that her death resulted from lead-poisoning, accelerated by want of food. The jury gave a special verdict, embodying with the medical reasons given in evidence, an opinion that, "considering the deadly nature of the occupation, the hours of employment in white-lead factories are too long; and also that it would be desirable that there should be a systematic inspection of such establishments by a Government officer."

**ODONTOLOGICAL SOCIETY.** At a meeting of this Society, on November 7th, Edwin Saunders, Esq., President, in the chair, Mr. Charles J. Fox read a paper on the Preparation of the Mouth for the Reception of Artificial Teeth. The paper ended with the following conclusions. 1. Every tooth, properly so called, should be retained as long as possible. 2. If any rule is to be laid down at all, it should be, that roots must be extracted prior to the adaptation of artificial teeth; but that circumstances so often occur to render departure from any such rule necessary, and this is a question involving in so eminent a degree the judgment of the dentist, that it is not advisable to publish any rules which may hamper him

in the exercise of his practice. 3. The use of temporary pieces is advisable, where possible; and the practice of a certain class of dentists, of inserting teeth soon after the extraction of roots, etc., without having explained the results of absorption to the patient, cannot be too severely reprehended. It seemed to be the general feeling of the Society, that even roots should be retained as much as possible; but that cases must be judged on their individual merits. At the next meeting, on Dec. 5th, Mr. N. M. Kingsley, an American dentist, will read a paper on the Treatment of Cleft Palate and Artificial Velum. Mr. Kingsley will describe the construction and application of a very ingenious artificial velum of his invention. We believe that some of the London surgeons, as well as dentists—Mr. Sercombe, etc.—who have worked in this field, will be present on the occasion.

**INDIAN MEDICAL OFFICERS.** The announcement of the probability of Sir Charles Wood being made a peer has been received by a large body of men in this country with feelings of great pleasure, but I fear the joy expressed is more on account of his leaving office than at his exaltation to the House of Lords. The Indian officers and the army surgeons have been lately joined in their attacks on Sir Charles Wood's mismanagement by his own Staff Corps. The hardest case seems to occur among the assistant-surgeons and the surgeons of the native infantry regiments. At full-batta stations an assistant-surgeon draws 317 *rupees* per month, while a young doing-duty officer draws 325 *rupees*. After six years' service the assistant-surgeon is entitled to be on a par with the captains; but what is the fact? While a junior wing officer gets 604 *rupees* the doctor only draws 433 *rupees*. There can be no doubt that for the first five years the medical officer is the worst paid officer in his regiment, and is not adequately repaid for the study and practice of his profession, when we compare his pay with that of native infantry regimental officers who have not half his work or responsibility. The medical service in India propose three things to remedy the defects: a staff salary when in medical charge, improved pensions, and abolition of enforced subscriptions to the Medical Retiring Fund.

**THE SCHOOL OF MEDICINE AT PARIS** was opened on the 3rd inst. M. Tardieu, the dean, delivered the introductory lecture—a *resumé* of the discoveries of the past year, praises and regrets for the dead, compliments for the living who retire from the Faculty, and plenty of good advice to the students. M. Durny added some of the latter on his own account. He was sorry to hear that the students did not attend their lectures regularly; that was wrong. Moreover, he added, wicked people asserted that some men obtained their doctor's cap who had never bled a patient, or even put on a bandage; that was very wrong. M. Tardieu, in his address, mentioned some facts which do not look well for the Parisian medical student. It seems that 2,677 presented themselves for examination last year. Out of the number who passed, only one-third obtained a second class, and only 13 out of 1400 obtained a first-class certificate. That, said M. Tardieu, cannot be the normal state of the Faculty of Paris. Bestir yourselves, young gentlemen! Work; study; an ignorant medical practitioner is a public scourge; an ignorant practitioner is a dishonest man! M. Tardieu is evidently of the same opinion as Calonne, Minister of Finance under Louis XVI. Calonne, it is said, died of a pleurisy and "an ignorant practitioner;" and when he was too far gone to be able to speak, he made signs for a pencil and paper, and wrote to his medical attendant as follows:—"You have murdered me! and



if you are an honest man you will never practise medicine any more." I wonder whether Cavour wrote anything like that to his doctors! (*Chemical News.*)

ADDRESSES TO THE LORD-LIEUTENANT. His Excellency the Lord-Lieutenant of Ireland has received addresses of congratulation from the medical corporations in Dublin. That from the Apothecaries' Company was as follows:—"We gratefully recognise, in the selection of a nobleman of your Lordship's approved wisdom and abilities to this high and responsible position, a renewed manifestation of Her Most Gracious Majesty's solicitude for the welfare of Ireland. We are filled with hope that Lord Carlisle's mantle, which he wore with such benignancy and influence, and wherein he sought with such assiduity to enwrap a nation's love, may descend upon your Lordship. We further congratulate your Lordship upon the auspicious period at which you assume the government of Ireland, when God, in His mercy, has crowned the year with an abundant harvest, and when the beneficent effects of education and Christianity overspread the country. As one of the national educational bodies whose province it is to watch over the health of Her Majesty's subjects, the Apothecaries' Company beg most humbly to tender their loyal services to your Excellency's Government." The deputation from the King and Queen's College of Physicians said:—"Founded by Royal charter in the ninth year of the reign of King Charles II, and intrusted with the medical education of the youth of this country, the College has endeavoured so to raise the standard of medical attainments as to secure to the people of Ireland an uninterrupted supply of highly qualified physicians. Removed, as we are, by our pursuits from the arena of political strife, we take no cognisance of matters extraneous to our more immediate duties, but upon questions of great sanitary importance which have from time to time occupied the attention of the public and the Government, the cordial co-operation of this College has been frequently displayed; and we beg to assure your Excellency that we shall be always ready to assist in forwarding such precautionary or remedial measures as may be thought conducive to the preservation of the public health." To this Lord Wodehouse replied:—"The best proof that you have fulfilled your duty as a college of medical education is to be found in the many eminent names that have adorned your profession in this country; and I have no doubt that you will continue to maintain your high reputation. In our days happily the importance of sanitary questions is generally recognised; but gentlemen so well acquainted as yourselves with the study of sanitary sciences know well how much remains to be done, both in collecting accurate facts from which the natural laws regulating the public health may be ascertained, and in reducing sound principles to practice. In carrying into effect sanitary improvements, the Government and the public must look for advice and assistance to those who have made such questions their special study; and I rejoice, therefore, to receive the promise of your co-operation and support." The College of Surgeons of Ireland presented the following address:—"We, the President, Vice-President, Council, and Fellows of the Royal College of Surgeons, have assembled to welcome your Excellency on your arrival in Ireland as the representative of her Most Gracious Majesty the Queen, and to express our determination to afford your Lordship's government all the aid we can offer in the department to which we belong, to promote the welfare of the educational institutions of this country. The College we represent has been created by Her Majesty, and her royal predecessors, as the charters declare, 'to

establish a liberal and extensive system of surgical education in this kingdom,' and 'to enforce a due course of regular education for students in surgery,' to effect 'which objects its members rely with confidence on that support and encouragement which your Excellency is sure to extend to all institutions so founded and authorised.' His Excellency read the following reply:—"As representative of the Queen, I return you my thanks for your loyal address. It is highly satisfactory to me to receive your cordial assurance that the distinguished College to which you belong will continue to afford to the Government its valuable aid in the important work of surgical education."

### OPERATION DAYS AT THE HOSPITALS.

|              |  |
|--------------|--|
| MONDAY.....  | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  |
| TUESDAY....  | Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| WEDNESDAY... | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.   |
| THURSDAY.... | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.   |
| FRIDAY.....  | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| SATURDAY.... | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

### MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

|            |  |
|------------|--|
| MONDAY.    | Medical Society of London, 8 P.M. Dr. Habershon, "On the Constitutional Character and Modifications of Skin-Diseases."—Lymphatic Society, 8 P.M. Mr. Redcliffe, "On the Prevalence, Distribution, and Limitation of Scarlet Fever in England."—Royal Geological—Entomological.   |
| TUESDAY.   | Pathological Society of London, 8 P.M.—Anthropological, 8 P.M.   |
| WEDNESDAY. | Obstetrical Society of London, 8 P.M. Dr. Wade (Birmingham), "On Puerperal Embolism"; Mr. L. Baker Brown, "Complete Extirpation of Uterus and Ovaries, with Large Fibrous Tumour"; Dr. Braxton Hicks, "On Delivery of the Head after Perforation." Medical Society of London, 8 P.M. Dr. Lindholm, "Lectures."—Geological. |
| THURSDAY.  | Royal.   |
| FRIDAY.    | Astronomical.  |

### REGISTRATION OF DISEASE.

MONTHLY RETURN of new cases of disease coming under treatment at Pauper and Public Institutions. (A.) In Manchester and Salford (Sanitary Association). (B.) At Preston (R. C. Brown, Esq.). (C.) At St. Marylebone, London.

|                                   | 5 weeks ending<br>Oct. 1, 1864. |    |     | 4 weeks ending<br>Oct. 29, 1864. |     |     |
|-----------------------------------|---------------------------------|----|-----|----------------------------------|-----|-----|
| Small Pox .....                   | 55                              | 1  | 15  | 15                               | 5   | 10  |
| Chicken Pox .....                 | 5                               | 3  | 8   | 5                                | 5   | 10  |
| Measles .....                     | 5                               | 1  | 11  | 4                                | 12  | 11  |
| Scarlatina .....                  | 10                              | 17 | 41  | 7                                | 1   | 5   |
| Diphtheria .....                  | 4                               | 1  | —   | —                                | —   | 1   |
| Throat and Cough .....            | —                               | —  | —   | 13                               | 2   | —   |
| Croup .....                       | 2                               | —  | —   | —                                | 1   | —   |
| Dysentery .....                   | 3                               | 14 | 1   | 14                               | 21  | 12  |
| Diarrhoea .....                   | 15                              | 24 | —   | 19                               | 13  | 5   |
| Enteritis .....                   | 24                              | 14 | —   | 5                                | 5   | 18  |
| Peritonitis .....                 | 24                              | 8  | 12  | 20                               | 3   | 10  |
| Bronchitis and Cough .....        | 104                             | 94 | 24  | 100                              | 167 | 241 |
| Pneumonia and Pleurisy .....      | 56                              | 47 | 14  | 55                               | 18  | 10  |
| Cardiac .....                     | —                               | —  | —   | —                                | —   | 1   |
| Accident and other diseases ..... | 512                             | 48 | 100 | 415                              | 513 | 387 |
| Totals .....                      | 660                             | 85 | 614 | 517                              | 221 | 538 |

## TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 87, Great Queen St., Lincoln's Inn Fields, W.C.

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE INDIAN MEDICAL SERVICE.—In February next, according to announcement, there will be an examination of candidates for the assistant-surgeons of the Indian Medical Service. We have no doubt that the terms of the Warrant just issued by Sir C. Wood will bring forward plenty of candidates on the occasion.

THE CASE OF ABDUCTION OF A NUN.—It was stated in the papers that Mr. Millar of Bethnal House Asylum signed the certificate of lunacy of the nun who was forcibly removed from this country, as all our readers may remember. Mr. Millar, we are informed, neither signed a certificate, nor had anything to do with her removal.

THE ARMY MEDICAL SERVICE.—SIR: I think of entering the army as assistant-surgeon, but should not do so if I could not live upon the pay of assistant-surgeon. Could I live equal to the other officers upon the pay without other private means? How are the expenses incurred? are they available? Apologising for the trouble I give you. I am, etc., STONEWALL.

[We will answer our correspondent in the words of an army surgeon of considerable experience. "Ten shillings a day, or £180 a year, is very fair pay for a young surgeon to start on. With very strict economy, he can avoid, but only just avoid, debt. A change of uniform—a thing of common occurrence—would swamp him at once. But 13s. or 15s., after ten to twelve years' service, is not enough." EDITOR.]

THE DENTAL REVIEW has reached its fourth number, and well sustains its original promises. The last—the October—number contains original communications by Mr. Fuller, Mr. A. Tribe, Mr. Hulme, and Mr. Hockley.

AN ARMY MEDICAL OFFICER writes:—"The treatment accorded to medical officers cannot often be fairly called 'ungentlemanly'; it is merely the systematic refusal to recognise relative rank; and therefore it is that medical officers are, as a rule, treated as 'outsiders', without a recognised place as such, unless it be that assigned in the *Army List*; viz., last of all; and this, although scarcely 'ungentlemanly', is certainly derogatory to the profession. It must be borne in mind, that in the army, a fixed, definite position, carrying respect with it, is essential; and clearly it is absurd to place any man in a dubious position, and tell him, as the Duke of Cambridge said, 'You behave well, and you will be treated well'; for in such a case the majority of mankind are disposed at first to treat such a man badly, and he must of necessity have hard work to work himself into that position which he ought to occupy in virtue of his education, rank, and profession."

THE INDIAN MEDICAL SERVICE.—A high authority, late of the Indian Medical Service, writes as follows:—"The recently published despatch of Sir Charles Wood seems fully to remove all cause of complaint. After careful examination of that document, I must acknowledge that the Indian Government has at last dealt fairly, and, in many respects, liberally, to its medical officers; and the fulness of these concessions is the best proof of the reality and the justness of the complaints which have been so long and so ably urged upon the attention of the authorities by the medical press. I trust that the recent triumph is the forerunner of an equal measure of justice to the medical officers of the Royal Service. You will observe that Sir Charles Wood has not alluded to the vexed question of relative rank, as respects the claim to the Presidency of mixed Boards. Doubtless, he does not feel competent to deal with this matter, which must be fought out with the Horse Guards."

THE GRIFFIN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—Dr. F. Fitch (Kidderminster), 5s.; Dr. Gibbs (Westbury), per G. Shorland, Esq., 5s.; Isaac Tucker, Esq. (Westbury), per G. Shorland, Esq., 5s.; Dr. Seale (Westbury), per G. Shorland, Esq., 5s.; G. Shorland, Esq. (Westbury), 5s.; Dr. Hooper (Camberwell), 10s.—Amount previously announced, £108:7:6. Received at the *Lancet* office, £0:14:—

I am, etc.,

ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, November 30th, 1864.

ANOTHER NOT BAD SUGGESTION.—"I wish," writes a correspondent, "to make an observation on a suggestion, which was made in the last number of the JOURNAL, respecting those gentlemen who are dissatisfied with the JOURNAL. Instead of attempting to sow dissensions in our ranks, or making any alteration in our laws to suit their views, I would simply point out to them, that there is a society already formed, called the Medical Protection Society, which has no journal, and the annual subscription is the same as to the British Medical Association. If they are so satisfied that the JOURNAL is a clog to the Association, here is a society which embraces what they wish; and as it has not been attacked by the *Lancet*, I must presume that the funds are appropriated to what it professes; namely, in protecting the medical profession; and if it does not succeed, the inference to be drawn is, that it might have done so had there been a journal, and an argument in favour (if one is required) of our JOURNAL. A medical friend wrote to me a few days ago, and wished to join the Association for the sake of the JOURNAL. So far as my own opinion is concerned, I look upon the JOURNAL as inseparable from the Association, although there are several points in which I differ from you."

ECZEMA.—SIR: Mr. E. Wilson, in his admirable paper on Eczema, in the JOURNAL of November 19th, speaks of a solution of caustic potash being very useful in some cases. Will you allow me to ask him—1. Of what strength it should be? 2. How often repeated? 3. Does it, as a rule, cause much pain? I am, etc.,  
November 25th, 1864. ENQUIRER.

COMMUNICATIONS have been received from:—Mr. J. Vose Solomon; Dr. C. H. F. Routh; Dr. Thudicum; Dr. James Russell; Mr. T. Jones; Mr. T. M. Stone; The Registrar of the Medical Society of London; Mr. Pick; The Honorary Secretary of the Epidemiological Society; W. A. J.; The Honorary Secretaries of the Obstetrical Society of London; Mr. Higginbottom; Mr. W. Parker; Enquirer; The Secretary of the Obstetrical Society; Dr. R. Fowler; Dr. G. M. Humphry; Mr. S. H. Steel; and Mr. Le Gros Clark.

## BOOKS RECEIVED.

1. A Clean Skin: how to get it and how to keep it. By John W. Williams. London: 1864.
2. Transactions of the Pathological Society of London. Vol. xv. London: 1864.
3. Lectures on the Diseases of the Stomach. By W. Brinton, M.D., F.R.S. Second edition. London: 1864.

## ADVERTISEMENTS.

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# Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### ST. GEORGE'S HOSPITAL.

THREE CASES OF SYPHILITIC DISEASE OF THE LARYNX:  
IMPENDING SUFFOCATION: LARYNGOTOMY:  
RECOVERY.

By THOMAS P. PICK, Esq., Surgical Registrar;  
late House-Surgeon.

AMONG the organs which come under the cognisance of the surgeon, as not unfrequently affected with syphilitic disease, we find the mucous and submucous tissues of the larynx. This may arise simply from an extension backwards of the more primary affection of the throat; but most frequently it appears independently of this affection, and at a considerably later period of the disease. Thus, in an analysis of fifty-six syphilitic patients recorded in the *British and Foreign Medico-Chirurgical Review* for July 1861, eighteen were found to be affected by disease of the larynx. And, according to Ricord, "the proportion of cases of laryngeal disease is greater among those who have tertiary than those who have secondary syphilis."

In many of these cases, it becomes necessary to open the windpipe, in order to prevent impending suffocation; and this was found to be necessary in the two cases detailed below, which occurred while I was house-surgeon to St. George's Hospital, and in which I performed that operation.

CASE I. Hannah G., aged 23, general servant, was admitted November 2nd, 1863, into Queen's Ward, under Dr. Pitman. She stated that she had always enjoyed good health till within this last three years, since which time she had suffered from "winter cough" and sore-throat. Twelve months ago, an eruption broke out on the arms and body, coincident with a very bad sore-throat and loss of voice. She was under treatment for the eruption; but it remained out four or six months, when it disappeared. She stoutly denied all primary sore. Eight days before admission, she went to bed feeling quite well, but was seized about seven in the morning with what she called "croup"—viz., wheezing inspiration. She had been attending as an out-patient; but, as she became worse, she was admitted.

On admission, she was a stout, healthy-looking woman. There were some patches of old partially faded psoriasis on the arms and chest, and a well marked chain of characteristic enlarged glands in the groin and down the posterior triangle of the neck. The breathing was extremely difficult, and accompanied by a wheezing inspiration; it was almost impossible in the supine posture. There was pain on pressure over the larynx, and mucous *râles* over both lungs posteriorly. The face was flushed; the skin hot and moist; the tongue furred; pulse 96; bowels open. A blister was applied to the sternum. A grain of calomel and a quarter of a grain of tartar emetic were ordered every three hours; beef-tea for diet.

November 4th. She continued much the same; had great difficulty in breathing, and considerable cough. She had not slept, and had been sick. There

was swelling of the throat externally. Pulse 96; bowels not open. The pills were ordered to be given every six hours; and ten grains of iodide of potassium in nitre draught every six hours.

November 6th. The breathing had become very considerably worse, and had assumed more of a spasmodic character. She had not slept at all. Pulse 112. She was ordered to take at night a quarter of a grain of extract of stramonium, and three grains of extract of hyoscyamus.

November 7th, 1 A.M. Breathing much worse; spasms more frequent, and much more severe in character; lips livid; face bedewed with perspiration; eyes bloodshot; nostrils dilated, and constant gasping efforts for breath; pulse very feeble. Laryngotomy having been determined upon, I performed the operation. There was some little difficulty, on account of the quantity of fat which had to be cut through, and the free hæmorrhage from the congested vessels; and, before the larynx could be opened, she had ceased to breathe, and the pulse had ceased to beat. As soon, however, as the cannula was introduced, artificial respiration was set up, and in a few minutes she began to breathe quietly through the tube, and soon fell into a placid sleep.

11 A.M. She had passed a quiet night, and had had no difficulty in breathing; expressed herself to be immensely relieved. Skin hot; pulse 130, full; respirations 35 in a minute; tongue white; bowels freely open. A cradle, covered with flannels wrung out in boiling water, was kept constantly over her neck; and the inner tube was frequently taken out and washed.

She went on well till the 10th, when her gums became sore. The breathing was perfectly easy; pulse 96. The pills were omitted; and she was ordered to take ten grains of chlorate of potash in nitre draught every six hours.

On the 17, she still continued comfortable, and was ordered a mutton-chop.

December 16th. A cork was placed in the tube; but she was unable to breathe with it for long. The throat was examined with the laryngoscope. There was found to be increased redness of the mucous membrane, with injection of the superficial vessels. There was great swelling of the superior vocal cords; so much so, that they approximated and met in the median line, entirely obstructing a view of the rima glottidis and true chordæ vocales.

December 22nd. She still had great difficulty in breathing, if any attempt was made to close the mouth of the tube. There was very little discharge, and no dysphagia. She could articulate freely by placing a finger on the tube; but the voice was hoarse, and often degenerated into a whisper. She was ordered a drachm of solution of bichloride of mercury and five grains of iodide of potassium in cinchona draught three times a day.

January 13, 1864. She had been going on well till this day, though there was still very little, if any, air taken in by the mouth. Laryngoscopic examination revealed much the same state of things as before, except that there was not quite so much congestion.

She was made an out-patient at her own request. She continued to attend for some time, and was then lost sight of till Oct. 31st, 1864, when she came to the hospital to show herself. She stated that, since she went out, she had enjoyed good health; and that she was as strong and well as ever she was; in fact, that she had married; but that she breathed entirely through the tube, "no air passing the natural way".

On examination by the laryngoscope, very extensive nodulated thickening was found filling up the whole of the larynx above the true vocal cords; it appeared to implicate the superior vocal cords. The

swelling was greatest on the right side; and the two sides did not quite approximate, but a narrow chink was left; so narrow, however, that nothing could be seen through it. A twenty-grain solution of nitrate of silver in an ounce of water was applied to the thickening, and has been repeated three times a week ever since. She was also ordered ten grains of iodide of potassium three times a day. There has been, however, no material improvement.

CASE II. John T., aged 28, labourer, was admitted January 27th, 1864, into Hope Ward, under Dr. Fuller. He stated that he had had a chancre twelve months previously, followed by secondary sore-throat and eruptions. Three months ago, he became very hoarse; but this symptom subsided after a time. For the last six weeks, he had suffered from loss of voice, pain in the larynx, and difficulty in swallowing. He had been under medical treatment, and improving till January 26th, when he was seized with a most urgent attack of dyspnoea and very severe pain in the throat.

On admission, there was an extremely anxious expression of countenance; pulse 80; burning hot skin; noisy respiration, and a peculiar barking cough. He was ordered salines and antimony.

Feb. 2nd. He continued much the same till this date. The breathing was extremely difficult and laboured. He had not slept for two or three nights.

About 11 P.M., the resident medical officer and myself were called to him, and found him evidently in a state of impending suffocation; the face was blue, and he was making violent efforts at forced respiration. I immediately performed laryngotomy; and so great was the relief that, before the tube could be tied in, he was in a sound sleep, in which he continued for five hours; he woke up easy and comfortable, with a full, frequent pulse and warm skin, and all anxiety of countenance gone.

He went on well after the operation. On January 15th, he began to breathe through the mouth; but could not be induced to allow the tube to be left out, as, when it was, he became nervous, and then had an attack of dyspnoea. He, however, went about with a cork in it.

The laryngoscope showed very considerable thickening of both true and false vocal cords, though there was still a large interspace left between the right and left cords, apparently quite sufficient for all ordinary purposes of breathing.

He was discharged April 20th, since which time he has been lost sight of. During the period he was in the hospital, he took the biniodide of mercury.

Syphilis appears to affect the larynx in three distinct ways. First, in the form of condyloma; and this is described by some authors as the commonest affection in the earlier stages. (Virchow's *Archiv f. Path., Anat., und Phys.*, vol. xxi, part i.) This form was well exemplified in a man recently under treatment as an out-patient at St. George's Hospital. He had had a chancre some nine months previously, of which some induration still remained, followed by secondary eruption and sore-throat; and he applied at the hospital for rupial ulcer, nocturnal pains in the shins, and considerable aphonia. On examining the larynx, several small, irregular, uneven growths, were found lying along both vocal cords, but principally the right, forming, as it were, a serrated margin along the free border of the cord. Under the use of large doses of iodide of potassium, he got considerably better, and recovered his voice somewhat; but was unfortunately lost sight of before he had entirely recovered, or before it had been ascertained whether the growths would disappear without local treatment.

Another form of syphilitic disease of the larynx is the form usually described in books under the name

of "syphilitic ulceration of the larynx." This form, however, of simple ulceration, without thickening, probably only exists as an extension backwards of ulceration of the palate. It is characterised by cough, difficulty in deglutition, huskiness of the voice, and expectoration of bloody, purulent matter, frequently very offensive. On examining the ulcers, which are situated, for the most part, about the rima glottidis, they will be found to present a peculiar character, their edges being puckered, and drawn into white, tense folds, radiating, as it were from the ulcer as a common centre, and resembling very much the cicatrix left by a common burn. This form of disease is commonly associated with extensive ulceration of the uvula, soft palate, and adjacent structures.

But by far the most common form of syphilitic disease for the larynx to assume, is that to which the two cases recorded above belong; viz., where there is a deposit of a fibro-plastic material in the sub-mucous areolar tissue, causing thickening as a primary affection; but, no doubt, sometimes terminating eventually in ulceration of the adjacent parts, probably from mal-nutrition, or from the local irritation of a foreign body. A good example of this form of disease, progressing to its final stage, and which terminated in death, occurred in St. George's Hospital about the same time as the above two cases.

CASE III. J. W., aged 46, discharged soldier, was admitted October 7th, 1863, under Mr. Pollock. (For a full report of this case, as well as a similar one, see *Trans. Path. Soc.*, vol. xv, page 36.)

He stated that he had had syphilis, followed by secondary syphilis, many years ago; but that he had been quite free from all disease, till twelve months ago, when he was an in-patient, with difficulty of breathing and hoarseness. He went out relieved; but the symptoms had returned a few weeks ago.

On admission, there was considerable difficulty in breathing, and he was unable to lie down; his voice was scarcely to be heard; and his face was dusky and anxious. There was no expectoration; no difficulty, but pain, in deglutition.

The evening after his admission, he suddenly jumped out of bed and rushed out of the ward, declaring he was suffocating. My colleague Mr. Maude, and myself, were immediately summoned; and we found him gasping and struggling for breath; the face having become blue and respiration being extremely rapid, inspiration being accompanied by a whistling noise, though very little air could be heard entering the lungs. Mr. Maude directly opened the larynx, with immediate relief. This relief continued; and, after about three weeks, he was able to breathe through the natural orifice. The cannula was removed, and the wound allowed to heal up. At this time, an examination was made with the laryngoscope; the epiglottis was found to be thickened, especially on the left side. There was considerable thickening and bulging about the false vocal cords and rima glottidis on both sides, so as partially to obscure the view of the true vocal cords; but on making him take a deep inspiration, they, to a certain extent, came into view, and appeared to be much thickened.

He was discharged November 14th.

He was seen again by myself on December 31st, about 10 P.M. He complained of pain in the epigastrium. His breathing was not difficult, nor his countenance dusky. Under these circumstances he was handed over to the resident medical officer, who ordered him some salines and antimony. According to the nurse's report, he slept comfortably all night and conversed with her about six, but upon her going to look at him about eight, he was found to be dead in his bed—having died without a sound sufficient to



arouse the attention of the nurse or the patient who lay in the next bed.

**POST MORTEM EXAMINATION.** When the glottis was inspected from above before the larynx was opened, it appeared that such was the tumidity of the parts above the cords that no orifice was apparent. This was due to a general condition of œdema, which reached from the inferior vocal cords to the base of the epiglottis; the swelling was greater in the latter than in the former situation. There was thickening of the epiglottis, especially towards its base, and one of its edges was irregularly twisted. The body of the cricoid cartilages was in a great part detached from the tissues in which it is imbedded. The upper and inner part was replaced by bone, and this bone retained its unions with the soft parts, though partially separated from the adjoining cartilage. The cartilaginous part of the structure which composed by far the greatest part of its bulk, was only detached laterally. In a vertical section a channel could be traced completely round it, dividing it posteriorly from the soft parts, anteriorly from the soft parts and its own osseous portion. In a horizontal direction the separation extended irregularly for rather more than an inch. It was incomplete, except opposite to the central part of the body.

The channel contained a small quantity of pus, which was most abundant at the upper part of the cartilage, and thence led, burrowing upwards, into a sort of sinus, which extended to a level with the superior vocal cords. The separated cartilage had a natural appearance on section. The submucous cellular tissue was thickened by deposit of lymph, especially that covering the superior vocal cords, so that these structures were much rounded and enlarged. The lungs were much congested, and there were old cicatrices at both apices. The kidneys were granular.

This case is recorded somewhat fully, since it exemplifies a later stage of the disease than the two preceding ones, and a stage to which, for the most part, all these cases come, unless the disease be arrested by appropriate remedies, namely, necrosis of the laryngeal cartilages. In fact, observation seems to prove that many cases of disease of the cartilages of the larynx, attributed to so-called laryngeal phthisis, would, if accurately investigated, prove to be cases of fibro-plastic deposit due to the syphilitic virus.

Of the various cartilages the cricoid appears to be much the most frequently diseased, and of this the posterior segment, either in part or the whole. If the patient's life be prolonged, the cartilage, once necrosed, sets up irritation, followed by inflammation and suppuration; the matter formed may either point and burst internally and form a fistulous opening through which necrosed portions of cartilage may be coughed up, or it may undermine the tissues of the neck, pointing externally. When these two conditions occur conjointly, they give rise to aerial fistulæ—bubbles of air escaping during respiration.

**RUSSIAN STUDENTS.** The Russian government makes great efforts to obtain well trained medical men for civil and military appointments, and with this view sends many young Russians to study in foreign universities at the expense of the Empire. At Giessen there were last summer six such students studying zoology under Leuckart. There are so many now distributed over the German universities, that they require a special inspector, and with this office M. Pirogoff, the well known surgeon and author of the *Journal de Médecine*, has been entrusted. M. Pirogoff visited Berlin last summer to inspect the special clinics in review.

## Original Communications.

### THREE CASES OF OVARIAN DISEASE TREATED BY OVIOTOMY.

By WILLIAM LIDDON, M.B., F.R.C.S., Surgeon to the Taunton and Somerset Hospital.

THE pathological specimens of two of the following cases, with others from the hospital museum, formed the groundwork of a paper read before the West Somerset Branch of the Association in the early part of the present year. I now submit the details of those cases, with the particulars of another which has since fallen under treatment.

**CASE I.** *Multilocular Ovarian Tumour, Nine Years' Duration: Ovariectomy: Death Sixty-six Hours afterwards: Tumour Twenty-three Pounds in Weight.* Mary M., aged 37, married, was admitted into the Taunton and Somerset Hospital, under the care of Dr. Kelly and Mr. W. Liddon. She had twins fourteen years previously, but had not since been pregnant. The catamenia were regular. The tumour was first noticed nine years ago.

On admission (November 29th, 1862), her complexion was pale, her hair red. She had little flesh. The abdomen was much distended, especially below the umbilicus; the circumference at the latter point was 40½ inches. A liberal diet and iron and quinine were ordered.

The diagnosis was, a multilocular ovarian cyst, with solid and fluid contents; the former much in excess; without adhesions, and accompanied with ascites.

Early in January 1863, the general health had much improved; and the patient was very desirous that an operation should be performed. After a consultation of the medical staff, ovariectomy was decided upon; and on January 27th, 1863, she was placed under chloroform by Dr. Kelly. The bladder having been emptied, an incision extending downwards from the umbilicus was made, and the surface of the tumour exposed; a large quantity of ascitic fluid escaping. Spencer Wells's trocar was introduced three or four times, but with little effect. The wound was therefore lengthened to four inches above the umbilicus, and the tumour easily tilted out. One large adhesion existed between the omentum and upper part of the tumour. The pedicle was rather short, and connected with the right ovary. After being transfixed with a double ligature, and tied, it was secured externally by Spencer Wells's clamp. The omental adhesion contained such large vessels, that it was secured in two portions, and retained externally at the upper end of the wound, as the pedicle was at the lower. The wound was closed by hare-lip pins and strapping.

The operation was well borne. On her recovery from the chloroform, forty drops of Battley's sedative solution were given.

January 30th. The bladder was relieved by the catheter. Pulse 108. There had been considerable oozing from the wound, apparently of ascitic fluid.

January 31st. The patient had a violent rigor. Pulse 150.

In spite of brandy and beef-tea injections, etc., she died on February 1st, sixty-six hours after the operation.

**POST MORTEM EXAMINATION.** Thirty hours after death. The abdomen was much distended with gas. The weight of the tumour was 23 lbs. 10 oz.

pedicle were situated. There was no peritonitis. The clamp was still *in situ*, and was found to be placed close on the uterus. The left ovary was healthy. The head and chest were not examined.

**CASE II. Multilocular Ovarian Tumour: Extensive Adhesions: Removal of Uterus and both Ovaries: Recovery: Subsequent Formation of Pelvic Abscess, and Death.** E. H., aged 24, single, was admitted February 21st, 1863, under the care of Dr. Edward Liddon and Mr. W. Liddon, with a tumour of large size connected with the right ovary.

Menstruation had been scanty and irregular since November 1862, the date of the commencement of the disease. From time to time she had felt a dragging in the abdomen, but no severe pain. She had one child eight years previously, but had not since been pregnant.

On her admission, extending from the lower part of the abdomen upwards as far as two inches above the umbilicus, was a solid pyriform mass. There was no ascites. The tumour was apparently free from adhesions. The circumference of the umbilicus was 33½ inches. Her general health was good. There was no albumen in the urine, but she had a constant desire to empty the bladder.

During the early part of her stay in the hospital, the tumour increased slowly, but subsequently with considerable rapidity. She suffered from occasional attacks of local peritonitis and diarrhoea; the legs swelled; and ascitic fluid made its appearance. Two or three secondary cysts became prominent; one near the umbilicus was tapped, and a small quantity of fluid withdrawn. Her general health also suffered; and it became evident that operative interference could no longer be delayed.

Accordingly, on July 31st, chloroform was administered by Dr. Liddon. The solid nature of the tumour necessitated an incision extending from a point half an inch above the umbilicus downwards nearly to the pubes. A large firm band, two inches broad, extending from the right iliac fossa across the tumour to its upper and left side, was tied in two places, and divided intermediately; this afterwards proved to be the lengthened pedicle. Several cysts were tapped, without materially lessening the bulk. Adhesions existed between the whole posterior surface of the tumour and intestines; and, in endeavouring to separate these by the hand, the diseased mass broke up, and was removed piecemeal. Another cyst, apparently growing from the whole posterior surface of the uterus, and occupying the pelvic cavity, was then discovered. The connexion with the womb being of so intimate a character, it was deemed inexpedient to attempt separation. Accordingly, a stout ligature was applied to the neck of the uterus, as well as the clamp; the latter thus retaining the body of the uterus and its appendages outside the wound. The pedicle of the large tumour was connected with the right ovary, and quite a foot long. The left ovary was healthy. The wound was closed with wire sutures, deep and superficial. The patient suffered greatly from the shock of the operation.

The clamp was removed on August 8th; the included uterus having sloughed away. Adhesions had formed between the stump and edges of the wound. The former gradually retracted, carrying the integument with it, and forming ultimately a sort of second umbilicus, from which for many days a black acrid discharge freely escaped. The upper part of the wound healed by primary adhesion. The catheter was not once required. She progressed remarkably well, and was discharged cured on October 18th.

On her presenting herself at the hospital in the second week of November, the following note was

made. Her general health was re-established. The vagina was considerably elongated and drawn upwards; no os uteri could be felt. She had perfect control over the bladder.

From October 18th, 1863, to January 22nd, 1864, she performed the ordinary duties of a dairy-maid; and on several occasions walked from her home into the town and back, a distance of between seven and eight miles.

On January 22nd, 1864, she was readmitted, with supposed retention of urine. For three weeks previously, she had occasional pains in the lower part of the belly; but for three days only had difficulty in passing urine. She was fat and muscular, but suffered acute pain in the hypogastrium; her legs were drawn up, and she experienced great difficulty in micturition. She had shivered much, and was sick and feverish. A firm and irregular swelling, slightly elastic and very tender, occupied the right side of the hypogastric and iliac regions. The urine was very scanty and highly albuminous. The bowels were not moved for eight days, but afterwards diarrhoea set in. During this period, the tumour reached the umbilicus, distending the lower part of the cicatrix, where it ultimately pointed and burst, giving exit to a most offensive blackened slough, sero-purulent discharge, and finally feculent matter. She became emaciated, and died on May 6th.

**POST MORTEM EXAMINATION.** On opening the abdomen (a portion of the walls being left around the artificial anus), the small intestines lay completely matted together, occupying the pelvis. The interior of this mass was a large cavity, communicating with the external wound, and running upwards into the substance of the right psoas muscle, and outwards into that of the iliacus. It was, in fact, a large abscess, bounded much as follows: in front, by the abdominal walls and bladder; laterally and above, by the matted intestines; below and behind, by the top of the vagina and rectum. On opening this, three or four communications were found to exist between it and different points of the intestines; whilst in other parts the serous coat of the bowel was its boundary. The vagina terminated in a puckered cicatrix. The liver was pale and enlarged.

For notes of the above cases, I am indebted to Mr. F. W. Gibson, the house-surgeon of the hospital.

**CASE III. Unilocular Ovarian Cyst, Twenty-six Pounds in Weight: Ovariectomy: Recovery.** Miss —, aged 18, single, consulted my father, Mr. Henry Liddon, in the autumn of 1863. She was suffering from a large unilocular ovarian cyst, of two years' duration. As the tumour was increasing rapidly, and fluctuation very distinct, with the sanction of the late Dr. Burridge, a trocar was introduced, and about a pint of thick viscid fluid, like white of egg (becoming solid on boiling) escaped with great difficulty.

Messrs. Alford and Cornish also saw this patient in consultation. Extirpation was recommended; and on February 4th, 1864, chloroform having been given by Dr. E. Liddon, and with the assistance of Drs. Kelly, Penny, and H. J. Alford, in addition to the above named, ovariectomy was performed. The tumour was a single cyst; and, from the tenacity of its contents, not lessened by the trocar; it therefore required an incision extending above the umbilicus, and was removed as a solid tumour. There were no adhesions. The pedicle was broad and short (connected with the left ovary); it was transfixed, and secured by double ligature and clamp. The right ovary was quite healthy.

The clamp was removed on February 7th; and, excepting at the point where this had been placed, the wound had joined by first intention, and was quite



healed by the end of six weeks. The recovery was greatly retarded by an irritable state of the intestinal canal, associated with diarrhoea and flatulence; the latter to such an extent, that one or two of the deep wire sutures snapped, and opening up of the wound threatened.

For their valuable and numerous suggestions in the after-treatment of this case, I am greatly indebted to Dr. Liddon and my father.

November 1864. This patient is quite well.

REMARKS. Ascites and oedema of the lower extremities existed in the first two cases, being due to pressure, and indicating in the second case the rapid growth of the disease. Though ascites is not a desirable complication, yet its presence in each of these cases afforded valuable evidence in concluding that the anterior surface of the tumour was unattached to the abdominal wall; this being made manifest by placing the patient in different positions, and watching the wave of fluid beneath the attenuated parietes.

In the first case, only one adhesion existed; and the chief characteristic of this was not so much its extent as the size of its vessels. For the latter reason, it was viewed in the light of a second pedicle, and retained outside the wound; the upper part being chosen, to avoid any dragging that might have subsequently taken place, had it been included in the clamp with the true pedicle. The unfortunate issue of this case prevented any true estimate from being formed, of this mode of dealing with adhesions of a formidable character.

In the second case, at the outset, the lengthened pedicle crossing the tumour was a source of difficulty, as its true nature was by no means clear. To account for its unusual length, the tumour originally, no doubt, was freely moveable, and afterwards rolled over on itself, its upper surface forming attachments below. The posterior adhesions, fortunately, though extensive, were recent; therefore easily separable, and non-vascular. The breaking down of the mass during the operation for some minutes complicated matters, it being far from clear whether or not hæmorrhage was taking place. Luckily, such was not the case; the bloody fluid within the abdomen being that of the broken-down tumour.

In dealing with the uterine adhesions, two proceedings were open for adoption—the one above described, or the clipping away of the cyst-wall excepting where adherent. The latter was not chosen, for the following reasons. 1. It would have been a matter of nicety, and taken some considerable time, which was of great moment, from the exhausted condition of the patient. 2. A number of small cysts were also attached to and growing from its free surface, some of which might have been possibly left behind, and formed the germs of a recurring disease. 3. From the successful result of a case recorded by Dr. Clay, who purposely removed the uterus, with a large tumour (uterine) attached.

The final result of Case II must be looked upon in a great measure as accidental, and as an example of what frequently happens in overtaking the strength of tissues recently concerned in the process of reparation.

One remark in conclusion. The use of the catheter was not called for after the operation in the second and third cases—a circumstance to be wished for on future occasions, and probably attributable to not carrying the incision too near the pubes.

FOOD FOR PIGS. In France they are feeding pigs on rice with great success. Porkers gain 25 kilogrammes in weight for every 100 kilogrammes of rice consumed. They are allowed to eat the rice as we are bread at the restaurants—a discretion.

## Transactions of Branches.

### BENGAL BRANCH.

#### CASES OF TYPHUS FEVER IN CALCUTTA.

By S. GOODEVE CHUCKERBUTTY, M.D.

(Read October 11th, 1864.)

As typhus fever has been hitherto supposed to be unknown in Bengal, the following cases are submitted, in the hope that their details may prove of interest to professional inquirers on this subject.

CASE I. Joseph Harlgrove, aged 25, a Portuguese seaman, of good constitution, was admitted into my European male ward on July 5th, 1864, with a fever of eleven days' standing. When taken ill, he was living in the "Irish Flag," a low boarding-house, situated in one of the filthiest parts of the town, and generally crowded by men of his class.

On admission, he was ordered to have an ounce of the liquor ammonia acetatis mixture of the hospital every four hours, milk and sago for diet, and congee water to drink.

On the 6th, his pulse was 100, moderately full and weak. There were numerous mulberry patches all over the body; some gurgling in the left iliac fossa; considerable headache; skin congested and hot; tongue dry, covered with fur about the centre, but clean and red at the edges; eyes ferreted; one large stool passed without griping or straining; some cough; pain in both knee-joints, more in the left; face flushed; no enlargement of the liver or spleen; no exacerbation, remission, or intermission. He was ordered

℞ Quina sulphat. gr. v; pulv. Jacob. ver. gr. ij;  
sodæ carbon. gr. v. M. Fiat pulvis ter die  
sumendus.

The head to be shaved, and cold applied to it.

July 7th. He was in much the same state as on the previous day. The skin of the body was still generally congested; and patches on the abdomen appeared to be vesicating partly. There was great prostration of strength. The medicines were changed to quinine and Dover's powder, five grains of each every four hours. The acetate of ammonia mixture was continued. A blister was applied to the left iliac region; and the cold to the head continued. Diet: milk, sago, and beef-tea.

July 8th. Pulse 112, exceedingly feeble; respiration 28; appetite bad; cough less; passed urine, but no stool; skin hot and dry; tongue very dry, glazed, and red at tip; face flushed still; slept; headache less. The Dover's powder was omitted; and beef-tea and port wine were ordered for diet.

July 9th. He had one scanty motion; no gurgling; tympanitis less; took his nourishment, though little at a time; was at times delirious; skin hot and dry; pulse 120.

July 10th. Two stools since last report; was restless and delirious during the night; skin moist, but still hot; face flushed; headache, cough, and cutaneous rash less; tongue dry, and covered with a thick yellowish-brown fur in the centre, dull red at the apex; lips dry and parched; gums and teeth covered with sordes; wandering in his mind. He was ordered to omit the acetate of ammonia mixture; to continue the quinine; and to have one ounce of stimulant mixture every hour.

July 11th. Pulse 100, excessively small and faltering; respiration 40; delirium about the same; skin dry and of a purplish colour; epidermis on the arms desquamating; lips and teeth covered with sordes;

tongue still brown, but moister; congestion of the eyes as before; no stool; urine, two pints, specific gravity 1025, offensive, light brown, acid, and free from deposit; percussion-note of the left side of the chest posteriorly, dull; respiratory murmurs exceedingly feeble; hypogastrium clear; urgent thirst.

July 12th. Urine, one pint and a half, specific gravity 1020, yellowish, acid, no albumen or deposit. A copious stool in the bed-clothes; took nourishment; was less delirious, though still drowsy, and muttering something to himself; skin cooler, paler, and covered with less of the petechial spots; tongue furred, deep brown, and dry; lips and teeth covered with sordes; dyspnoea less; did not answer rationally; respiration 32; pulse 96, exceedingly feeble, but a little better than yesterday. Stimulant mixture every half-hour; two eggs, with oil of turpentine; other medicines, etc., as before.

In the evening, he had had three stools; otherwise, was much the same.

July 13th. Three stools in the bed-clothes during the night; pulse 88, fuller and fuller; respiration 52, with weak murmurs, attended with some sonorous rhonchus in the right mammary region; expectoration composed of thick mucous sputa; eyes less congested; countenance more intelligent than hitherto; heat of skin less; redness and mulberry patches very little diminished.

July 14th. Two dark, brownish, faeculent stools; speech not very intelligible; countenance more intelligent; skin cooler; eyes better; slept in the night; respiration hurried; pulse 92; tongue moist, and clean at tip and edges; far from being up, several pieces of it having already come off.

July 15th. No stool; he could not speak. A cathartic enema to be given at once. Other medicines, etc., as before.

July 16th. He was quite rational, though not able to speak properly; face still somewhat flushed; eye drooping; tongue moist, and nearly clean, with very little remnant of fur; teeth and lips covered with a viscid sordes; skin supple and less hot; pulse 92; respiration 28; eruption considerably less; two stools in the bed-clothes; headache better.

July 17th. He spoke with difficulty; otherwise was improved; pulse 92.

July 19th. One stool from a turpentine enema; pulse 96 to 100; he slept a good deal; tremor of the body and hands; cuticle desquamating; a great many sudamina on the abdomen; tongue cleaner, but glazed; urine deep brown, acid; specific gravity 1020, no albumen, no sugar.

July 21st. Found sleeping; no subsultus; no muscular tremor; spoke a little; tongue clean and moist; pulse 80; he slept all night.

August 23rd. From the last date, the patient slowly but steadily improved, and was discharged cured this day, at his own request.

CASE II. Henry Stamford, aged 30, an English sailor (ship *Hippolyta*), was admitted into my European male ward on July 7th, 1864, with a fever, said to be intermittent, of two days' standing. He was given some quinine mixture and milk diet.

July 8th. He complained of pain in the loins and hepatic region; skin of natural temperature; tongue moist, but furred in the centre; appetite bad; one stool in the twenty-one hours. Six drachms of castor oil immediately.

July 9th. Five stools from the oil; face flushed, and covered with purplish patches, disappearing on pressure, but returning on its removal; ditto on the neck; trunk redder than yesterday, and covered with scattered mulberry patches; tongue tremulous, of good colour, with a rusty-coloured fur on its surface;

pulse 84, small and weak; respiration 20; headache and pain in the loins said to be better, but more pain over the liver; dimness of sight, and inappetency. Quinine and beef-tea were ordered.

After this, he soon got over his fever; but continued to suffer for some time with dysentery, from which he recovered slowly, not being discharged till August 5th.

CASE III. Hajim, aged 25, a Mohamedan, was admitted into my native male ward on July 9th, 1864, with a fever of ten days' standing. He was in a state of coma, greatly prostrated, with a feeble, indistinct pulse; occasionally delirious, with a vacant expression of countenance; skin dry and harsh; bowels open; urine passing into the bed-clothes. He was ordered quinine every four hours, and a mustard plaster to the neck.

At 9 p.m., his coma had lessened, but delirium had increased.

July 10th. No stool; slightly conscious; not so delirious as before; countenance sunken. He was ordered to continue the quinine; the head to be shaved, and a blister applied to it. Diet: sago, milk, kid-broth, and port wine.

July 11th. He had been very delirious since the last visit, tearing off his clothes, talking incoherently, and catching at imaginary objects; no stool since the night before last; clothes saturated with urine; percussion-note of the hypogastrium clear, of the epigastrium and right hypochondrium dull and painful, hepatic dulness extending below to the umbilicus, above to the right nipple, transversely to about an inch external to the left nipple, posteriorly to the spine; respiration 20; pulse 88, small, weak, but regular and steady; body generally cool and supple; lips and teeth covered with sordes; tongue dry, and covered with brown fur. The medicine to be continued; a blister to be applied to the hepatic region; the port wine to be increased; and an enema of turpentine and castor-oil in congee water to be given at once.

July 12th. Still delirious; was reported to have passed urine and stool after the enema, the latter containing four round worms; body cool; tongue moist and clean; pulse feeble. The medicine and food were continued. At 4 p.m., he was sleeping.

July 13th. Delirium much less; and general condition improved; took some nourishment; slept pretty well. Medicines and food continued.

July 14th. He felt better; was rational; no return of fever; pulse stronger; body cool; tongue clean and moist; took his food; slept well.

July 26th. He steadily improved since the last date, and was now discharged quite well.

CASE IV. John Baptist, aged 44, an East Indian stevedore, of slender make, was admitted into my European male ward with a fever of nine days' standing, on July 16, 1864. The fever had never remitted or intermitted since the first onset. On admission, he was given some fever mixture every three hours, and milk and sago for diet.

July 17th. Skin hot; pulse frequent; conjunctivæ pale; eight or nine stools in the twenty-four hours, thin and yellow; no headache; no enlargement of the spleen or liver; great prostration; muscular tremors; appetite bad; abdomen hard.

July 18th. He was given a cathartic enema yesterday evening, from which he passed some fecal matter; still hot and clammy; pulse more frequent; tongue moist and red at the edges and tip, dryish in the centre; appetite bad; slept well; much agitated; spleen projecting into the abdominal cavity about two inches. A powder of quinine and James's powder to be taken every four hours. Head to be shaved, and cold lotion applied. Turpentine fomentation to



abdomen. Diet: two pints of milk, ditto of chicken broth, and four ounces of port wine.

July 19th. Found sleeping on his back; skin warm, harsh, covered here and there with reddish patches; general surface redder than natural—the redness disappearing on pressure and returning on its removal; passed urine involuntarily in the bed-clothes; conjunctivæ muddy and congested; pupils moderately dilated, but rather fixed; lips dry; tongue moist, warm, and slightly furred; pulse 120, small and weak; respiration about 30; delirium still continued; four or five stools.

July 21st. Wished to leave the hospital, as his wife was just dead of the same fever, but was too weak; had four stools; free from fever; tongue clean at tip and edges, covered with a white fur in the centre; appetite bad; slept well. To have chicken grilled.

July 24th. Discharged, having steadily improved since the last report.

CASE V. Isabella Baptist, aged 32, an East Indian woman, wife of the last patient, was admitted into my European female ward at 6 p.m. on July 16th, 1864, with a fever of twelve days' standing, which had commenced with diarrhoea. She was passing then five or six loose stools a day; was greatly prostrated; had a very feeble pulse; dry and brown tongue; sordes on the teeth; eyes congested; skin not very hot; mind conscious. Quinine mixture was ordered every four hours; milk and sago, and port wine.

July 17th. She was getting lower; pulse feebler; body colder. Dover's powder immediately; stimulant mixture every hour; milk and sago, and port wine and beef-tea.

July 18th. Was delirious last night; skin hotter than natural; countenance a little lighter; much subsultus tendinum; pulse 100, small and weak; lips and teeth covered with sordes; tongue dry, rough, coated with a dark fur; respiration 56; percussion-note of the chest anteriorly pretty good, except in the situation of the liver and spleen; respiratory murmurs harsh and puerile; percussion-note of the back throughout dull; mucous rhonchus with very little vesicular murmur; some vibices on the skin of the back. Quinine and James's powder every four hours; port wine, chicken-broth, and milk.

July 19th. Was found lying on the right side, but afterwards turned on her back; raving incoherently; eyes congested and muddy; both pupils contracted to mere points; lips and teeth thickly covered with black sordes; tongue parched, covered with a dense brown fur; face flushed, and covered with indistinct reddish patches; body generally hot and dry; scattered petechial patches, here and there on the trunk; abdomen soft, but tender; pulse 100, small, weak; respiration 60; percussion-note of the anterior part of the chest as before; respiratory murmurs, above harsh, below weak, with some submucous rhonchus; vibices on the back more numerous; percussion-note duller than in front; respiratory murmurs feeble, and greatly masked by mucous clicks; motions passed in the bed-pan said to be thin; urine soiled the bed-clothes; no cough. Medicines continued; port wine, milk, and beef-tea.

July 20th. She died at eleven o'clock a.m. The body was not allowed to be examined.

CASE VI. James Brown, aged 25, a well made English sailor, living in the "Irish Flag", was admitted into my European male ward on July 30th, 1864, with dysentery of a fortnight's standing, with much straining, passing scanty, slimy, and bloody stools. He was ordered a powder of ipecacuanha, carbonate of soda, and acacia, every four hours; and milk diet.

July 31st. Much better; had had about a dozen soft feculent stools; skin very harsh, almost scurfy, and warm; abdomen soft, not sore; occasional griping; pulse 88, moderately full and strong and regular; tongue covered with a grey fur, dryish, dull red at tip; much thirst; did not sleep well; medicines did not make him sick. Treatment continued.

August 2nd. He was still improving, and was ordered to take dilute sulphuric acid and infusion of calumba.

August 4th. Five feculent stools in the twenty-four hours; he complained of a pain in the back and griping; skin less warm, and covered with perspiration; pulse full; tongue dry at the apex, covered with a yellowish fur on the surface behind; appetite bad; some induration and pain in the right hypochondrium; percussion-note there dull. Blister to the right hypochondrium. Diet as before, with chicken-broth and port wine.

August 5th. Quinine was added to the mixture.

August 6th. Two feculent stools, not very copious; flushed, especially in the face, neck, and upper part of the chest; cuticle desquamating on the legs, arms, and trunk; minute spots of a mulberry colour on the trunk, no larger generally than the marks of mosquito-bites; skin harsh, dry, and warm; pulse 104, small, weak, and regular; respiration 36; lips black and glazed; a spot of about the size of a split pea on the inner surface of the lower lip, covered with a creamy looking deposit; mucous membrane deep red; tongue dry, brown, rough, furred, except at the edges, where it was moister; sclerotic conjunctivæ slightly yellow; abdomen soft; some gurgling in the right iliac fossa; pain on pressure over the colon. Medicine every four hours. Milk diet, chicken-broth, milk and sago, and port wine.

August 7th. Body cool, and damp with perspiration; pulse 92, small, weak; respiration 32; three scanty, thin, clayey stools; tongue moist, clean, and of natural colour at tip and edges, with a few red points in the upper surface covered with a soft fur.

August 8th. Feverish again; skin hot, but damp; pulse 100, rather small and weak; respiration 36.

11.30 p.m. Pulse very feeble and quick; skin hot; great pain in the right hypochondrium. Fomentation to the painful part; and anodyne enema.

August 11th. Six scanty fecal stools; skin of ordinary temperature; pulse 76, small, weak; abdomen soft, painless; no borborygmi; no headache; a good deal of thirst; tongue moist, of natural appearance, but a little furred. Treatment continued. Diet, as before; grilled chicken to be added.

He continued to improve slowly from this date up to August 18th.

August 19th. Skin hot and dry; pulse 120; epigastrium very tender. Blister to the epigastrium. Acetate of ammonia mixture every four hours.

August 20th. Much better again; skin moist, and of ordinary temperature.

From this time he improved slowly; and was discharged quite well, at his own request, on Sept. 1st.

CASE VII. J. W. Macmahon, aged 37, a fair country-born European, unemployed, living at Turretta Bazaar, was admitted into my European male ward on Aug. 2nd, 1864, with a fever of six days' standing, which had come on after a prolonged debauch. On admission, he received an effervescent draught immediately; acetate of ammonia mixture every three hours; ice and milk and sago for diet.

August 3rd. Skin hot and dry; pulse 120, rather small and weak; respiration 36; face flushed; complexion jaundiced; pain on pressure in the right hypochondrium; area of the liver-dulness increased; had a yellow coloured motion in the morning; was sick all day yesterday, and vomited yellowish fluid;

complained of a dreadful pain in the lumbar spine; trunk covered with patches of a mulberry rash; tongue dry at apex, and smooth, but white, behind this, covered with a slight yellow granular fur, and moister; very severe headache; much thirst; no appetite; and ulcer on the left leg, with a good deal of inflammation of the skin about it, and several abrasions in other parts of the extremity from scratching; percussion-note of the chest in front duller on the left side than the right; respiratory murmurs weaker in the former. The former medicine was omitted. An ounce of castor oil immediately; and quinine, James's powder, and carbonate of soda, every four hours. Blister to the liver. Diet: milk and sago, ice, port wine, and beef-tea.

August 5th. He had been very restless through the night; very despondent; considerable headache; eruption on the front part of the trunk faded, but still present on the back; pulse very feeble, almost thready, 120; respiration difficult, 44; urine of the colour of turmeric.

August 6th. Was restless, and in a state of muttering delirium the whole night; subsultus tendinum of the arm; no muscular tremors; pulse 76, very small; tongue quite parched, pitted longitudinally; cutaneous eruption very much less on the back; head hot; pupils rather contracted. A mixture of quinine and dilute sulphuric and hydrochloric acid was ordered, in place of the former medicine.

August 7th. The delirium increased; skin of the body congested; the redness, in some places in patches, disappeared under pressure, and returned on its removal; sixteen or seventeen stools in the last twenty-four hours, liquid, and of a dark colour. Five minims of laudanum to be added to each dose of the mixture, head to be shaved, and ice applied; sugar of lead injections twice a day; diet and wine continued.

August 8th. He was quieter in the night, but complained now of a stiffness in the left side; skin of the body still mottled, of a mulberry colour; subsultus tendinum, muttering delirium, and general agitation, increased; the abdomen became very tender, even to his drawing up the legs when touched; and he died about a quarter after twelve noon on Aug. 9.

POST MORTEM EXAMINATION, eighteen hours after death. Legs rigid; arms less so; skin of the trunk and extremities covered with livid patches, varying in size, being larger and of deeper colour at the hands and feet; vertical section of the skin, and of the muscles, from this to the ribs, dry; so also incisions of the scalp, and even the surface of the cerebral membranes on opening the cranium. On removing these membranes, a small quantity of fluid mixed with blood flowed from the sinuses. On removing the brain, it appeared as if macerated in water; surface pale; dura mater and parietal arachnoid agglutinated, and adherent to the inner border of the cerebral lobes; a spiculum of bone was found in the anterior part of the fissure between the cerebral hemispheres; it did not seem to be in the falx cerebri, but was quite independent of it. On slicing the cerebral substance from the upper surface, the medullary portion seemed to be duller and redder than usual; little or no fluid in the ventricles; choroid plexuses pale; no softening of the optic thalami or corpora striata. On opening the large intestines, the cæcum was found to be generally quite healthy, but near its base congested; the ileo-colic valve was also congested; the ascending colon almost blackened in parts, in parts lighter, the blood-vessels here and there being in a state of racemose congestion; on the mucous membrane here were found little light coloured bodies of the size of mustard-seeds; the mucous membrane of the transverse colon was less congested,

and the congestion was arborescent in form; the rest of the large intestine was quite healthy. On opening the small intestines, nothing particular was observed in the ileum, except at one place some punctiform injection, and one or two places racemose injection; about two feet above the junction of the ileum with the jejunum, there was found a Peyer's patch of an oval shape, about one inch and a quarter in length, somewhat thickened, but the mucous membrane over it not differing from that on the valvule conniventes; about a foot higher up, another patch of a smaller size; another about two feet from the latter; another about one foot and a quarter from the last. Spleen slightly enlarged, soft, highly congested; kidneys enlarged and congested; liver and lungs congested; on section, there oozed from the latter a great quantity of reddish serum.

[To be continued.]

#### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

PLACENTA PRÆVIA IN TWIN BIRTH.

By F. W. PITTOCK, Esq., Sellinge.

[Read September 22nd, 1864.]

ALTHOUGH I shall bring before you no novel or original ideas, still the case I shall read to you will be one, I trust, not altogether devoid of interest. As my communication is headed *Placenta Prævia*, I will at once tell you that I am not about to open that wide and interesting subject, and to invite you to the discussion of one of the vexed questions of obstetrics, but simply to relate a case of *placenta prævia* as it occurred in my practice, and one which, I believe, is rarely met with.

E. M., aged 34, the mother of six children, having, at the seventh and eighth months of her pregnancy, sudden and violent gushes of hæmorrhage, I requested the midwife who was to attend her to send for me on the first ordinary symptoms of labour coming on. When I arrived, the patient was faint and blanched; the pains weak and irregular, followed by gushes and a constant draining. On examination, after removing the clots, the body of the uterus being low down in the pelvis, the os was dilated to the size of a half-crown, flaccid, and dilatable. From it bulged, as it were, or protruded, a portion of placenta. I ascertained that this was adherent to the internal ring, with a small section free on its inner side. Having given the patient a full dose of ergot and some brandy, with instructions to the nurse to administer the latter freely in teaspoonful doses, I at once, starting from the free portion of the placenta, commenced separating the adhesions with the forefinger. This occupied but a few minutes; and, a slight pain following, the placenta was expelled, and I was enabled to rupture the membranes. The head presented; and in ten minutes the child was born, of fair average size, but breathing feebly.

Placing my hand on the abdomen before applying a bandage, I was somewhat surprised to find that the uterus had every appearance of containing another fetus; and in half an hour, the pains following quickly, another child was born, vigorous and lively. To this succeeded a tolerable sized placenta, free from adhesions, and expelled entire.

Thus were there not only two distinct placenta, but the first one preceded the birth of a child, while the second followed the other as in ordinary labours. On mentioning the case to some of my friends, as I had never met with one before in my own practice, I found that such had never happened to them. I was, therefore, induced to make further inquiries; and,



from the replies of several of the leading obstetricians of the day, I learn that the case is of very rare occurrence. Unwilling to take up too much of your time by entering into the details of my correspondence (of which these letters, I think, will be abundant evidence, and which it may interest you to look over), it will be sufficient to enumerate some of my friends and correspondents who have been kind enough to interest themselves on the subject, and through whom I have been enabled to make some additional remarks to my own case. Having ascertained from such authorities as Drs. E. Lee, A. Farre, Murphy, and West, that they had never personally met with the like, I naturally wished to know if there were like cases on record. With the assistance of Dr. Hilton Fagge and Dr. Pittock of Margate, I was enabled to find some few authenticated cases on record; and here I might observe, in passing, that all foreign and home text-books, journals, retrospects, and reports, that were likely to bear on the subject, were searched.

The first case we discovered is related fully in the *Medical Times*, August 1854. Then follows a similar case in Dr. Barnes's Lettsomian Lectures for 1858. To these succeed four cases collected by Schuchardt, and published by him in one of the German medical journals in 1861, and afterwards translated and published in the *Edinburgh Medical Journal* for 1862. Next are four cases fully detailed in the early numbers of the *Lancet* for 1863. These are all the known published cases. Dr. Priestley, however, I ought to mention, says that he has seen a case similar; but, as it is not reported, I have not included it in my list. In 1862, Spaeth of Vienna published a detailed report of 1,850 cases of twin birth, which, on a moderate calculation, represent 148,000 single births. Now, as we know that statistics give us about one twin birth in eighty, and placenta prævia occurs once in 400 ordinary cases, it would follow that we might expect one case of placenta prævia in 36,000 twin cases. Not one of Spaeth's cases was the complication of placenta prævia. I have been favoured with some provincial statistics, to the number of 8,000; not one of them contains a similar case. One of my friends, who is a great enthusiast for statistics, furnishes me with the report of seventy cases of twins, and seems almost vexed that his list does not contain one similar to mine. On putting the question to some of the authorities of the day—Why does not placenta prævia occur oftener in twins?—the invariable reply is, that it does not frequently occur, but that it ought, considering the increased volume of the uterus in twin cases, and the large size of its single or double placenta, requiring so much larger a surface or area for their nutrition.

Without further trespassing on your time or patience, I bring my remarks to a close with alluding to one subject which is closely connected with twin births. Some of my correspondents almost deny separate placentæ; others record many and frequent cases of separate placentæ; and some are enthusiastic enough even to say that there are no double placentæ, but all are distinct. For myself, I can only say that, in the great majority of twins, the placenta is undoubtedly single, or so intimately connected as to be thought so; but that there may be two placentæ, one being expelled after each child, I have myself met with twice this year, excluding the case above related.

**REVIVED CORKS.** The attention of the French public has been called by M. Stanislas Martin to the employment of refuse corks collected by Paris scavengers, as dangerous to public health. Such corks used only to be employed by the ink and blacking makers, but their low price has of late induced retailers of bottled beverages to purchase them.

## Reviews and Notices.

**A MANUAL OF PRACTICAL HYGIENE**, prepared especially for use in the Medical Service of the Army. By EDMUND A. PARKES, M.D., F.R.S., Professor of Military Hygiene in the Army Medical School, etc. Pp. 612. London: 1864.

TREATISES on military medicine and surgery have abounded for years past; the diseases and injuries to which the British soldier is subject have been amply and ably described; and our knowledge of the treatment of them has gone on increasing. But, although men like Pringle and Lind had long ago forced on public attention the importance of preserving the soldier's health, and although some benefit has certainly arisen from their instructions, still any systematic attempt at preventing disease in the army and keeping the men in a healthy, and therefore efficient condition, was a thing unheard of a few years ago. The late Russian war, as our readers are probably aware, was the cause of a change. After that war was ended, a Royal Commission was appointed in 1857 to inquire into the Sanitary Condition of the Army in England; and to certain of the proceedings of that Commission this work owes its origin.

The new "Queen's Hospital Regulations", prepared by the Commission, and published by authority in 1859, gave the army medical officer a new position.

"Previously the army surgeon had been entrusted officially merely with the care of the sick, though he had naturally been frequently consulted on the preservation of health and the prevention of disease. But the Regulations of 1859 gave him an official position in this direction; as he is ordered 'to advise commanding officers in all matters affecting the health of troops, whether as regards garrisons, stations, camps, and barracks, or diet, clothing, drill, duties, or exercises.'

"The Commission also recommended that, to enable the army surgeon to do this efficiently, an Army Medical School should be established, in which the 'specialties of military medicine, surgery, hygiene, and sanitary science,' might be taught to the young medical officers entering the army."

The Army Medical School having accordingly been instituted, Dr. PARKES was appointed professor of hygiene; and, having ably performed his duties in that capacity for several years, he now attempts further to carry out the wishes of the Commissioners, by providing a text-book of hygiene for the use of the pupils of the school.

The work, though written specially with a view to military matters, is to some extent necessarily a treatise on general hygiene; being limited in this direction only by the circumstance that the author has had "to deal only with one sex, a certain age, and a particular trade". It is divided into two books; the first being devoted, for the most part, to general subjects, while in the second the service of the soldier is more particularly discussed.

The first book consists of twenty chapters; and the second of five.

In the first book, the first chapter is on Water. It commences with an abstract of the Army Regulations as to the duties of the medical officer in regard

to the water-supply of barracks, camps, hospitals, etc. Dr. Parkes then notices the quantity required for healthy men, and for the sick. He then gives directions for estimating the quantity of water yielded by rainfall, springs, rivers, and wells; and for determining, in a general way, the permanency of supply. On this point, in the absence of positive evidence, it is very difficult to arrive at a safe conclusion; but some information may be derived from the physiological and geological formation of the country.

"If there be an extensive background of hills, the springs towards the foot of the hills will probably be permanent. In a flat country, the permanency is doubtful; unless there be some evidence, from the temperature of the spring, that the water comes from some depth. In limestone regions.....springs are often permanent. In the chalk districts, there are few springs or streams..... The same may be said of the sandstone formations, both old and new; but deep wells in the sandstone often yield largely, as the permeable rocks form a vast reservoir. In the granitic and trap districts, small streams are liable to great variations, unless fed from lakes; springs are more permanent when they exist, being perhaps fed from large collections or lochs." (P. 7.)

The nature of water, according to the sources of supply, is next described; the various gaseous, organic, and inorganic matters likely to be met with are enumerated; and the properties of the water of springs and wells, according to the geological nature of the soil in which they are situated, are given briefly, but plainly. The author further notices the properties of rain water and of distilled water, the usual sources of contamination, and the characters of good drinking water; also, the physical, microscopical, and chemical examination of water. Dr. Parkes amply describes both qualitative and quantitative examination, showing not only the means of making accurate analyses, but also the proceedings by which the surgeon may obtain a sufficiently accurate result when his facilities for examination are comparatively small.

Next comes a section on the purification, storage, and distribution of water; its action on lead-pipes; the rules to be followed in searching for water; and special considerations on the supply of water to soldiers, among which are described simple means for filtering.

In the next section, Dr. Parkes describes the consequences of an insufficient or impure supply of water. Under the head of impure supply, he hints that bad water may, by more extended investigation, be found to be a more frequent source of disease than is at present recognised; indeed, in proportion to the care of inquiry and the accuracy of examination, the number of diseases connected with impure water is continually increasing.

The principal noxious ingredients in water are "animal matter, especially when of fecal origin; vegetable organic matter, when derived from marshes; and some salts."

"Of the various mineral ingredients, the least hurtful appear to be carbonate of soda and chloride of sodium, when not present in too great quantity. Carbonate of lime, when not exceeding twelve or sixteen grains per gallon, is not usually considered unwholesome; though it remains to be seen whether a more careful inquiry will not indicate some effect on digestion or assimilation to be produced by the con-

stant use of such a water. The salts usually considered hurtful, except when in very small quantities, are sulphates of lime and magnesia, chlorides of calcium and magnesium, nitrates and nitrites, and butyrate of lime." (P. 48.)

The author then enumerates some of the affections of the alimentary mucous membrane which have been traced to the use of impure water. Dyspeptic symptoms are caused by water containing sulphate of lime, chloride of calcium, and magnesian salts; iron, when sufficient to give a slight chalybeate taste, often produces slight dyspepsia, headache, and *mal-aise*. Diarrhoea has been described as being produced by water containing suspended mineral substances, animal, especially fecal, matters, and vegetable substances; dissolved animal organic matter; foetid gases; dissolved mineral matters; and metallic impregnation. Instances in support are given; and also of the production of dysentery by impure water. As to the production of affections of other mucous membranes by foul water, little is known; but Dr. Parkes thinks the point worthy of investigation.

The important etiological fact, of the propagation of some of the specific diseases by means of water, next receives due notice from Dr. Parkes. He first mentions malarious fevers, and quotes authorities from Hippocrates down to the present time to show the noxious effects of marsh-water. He refers to several remarkable instances in modern times. Mr. Bettington, of the Madras Civil Service (*Indian Annals*, 1856),

"Refers to villages placed under the same conditions as to marsh air, but in some of which fevers are prevalent, in others not; the only difference is, that the latter are supplied with pure, the former with marsh or nullah water, full of vegetable debris. In one village there are two sources of supply—a tank fed by surface and marsh water, and a spring. Those only who drink the tank water get fever. In a village (Tulliwaree) no one used to escape the fever; Mr. Bettington dug a well, the fever disappeared, and in the last fourteen years has not returned." (P. 53.)

Dr. Parkes considers that, from this and similar instances, the conclusion is correct, that in malarious districts "the health of the people is far more affected by the water they drink than by the air they breathe." He refers to some statements made many years ago by Mr. Blower of Bedford, that again in a village had been remarkably lessened by digging wells, and that, in one instance, almost the only family who escaped ague on one occasion was one which used well-water, while the others drank ditch-water. At Sheerness, also, the use of ditch-water has been believed to be conducive to insalubrity; and Dr. Parkes hints, that the great decline of ague in England may possibly be due to the use of purer drinking water. In reference to this point, it would be interesting to know whether, and how far, such a cause may be assigned to the disappearance of ague in Scotland.

The next disease noticed is typhoid fever; and Dr. Parkes brings forward instances in which the propagation of this disease has been traced with more or less accuracy to the use of water contaminated with the fecal matters of patients suffering from it. One interesting point to which Dr. Parkes directs attention, is the shortness of the period (two or three days) before marked symptoms appear, in cases where



water has been the source of infection, as compared with the much longer incubation (eight to sixteen days) required to produce the early *malaise* when the poison has been conveyed through the air. Dr. W. Budd informs the author that he believes infection to be much more certain when conveyed by water, and that the period of incubation is materially shortened.

Regarding the propagation of cholera by drinking water, Dr. Parkes considers that at first the evidence was very defective; but that subsequent experience has shown it to be very probable that the disease is sometimes communicated in this way. The facts in favour of this theory are, hitherto, the occurrence of local outbreaks in which contamination of the water was proved or very probable; the prevalence of the disease in districts among persons using an impure water, while those who drank water from another source escaped; and the immunity from the disease of towns which could have not had contaminated water, as well as the escape, in later epidemics, of places which had formerly been visited severely—the only appreciable cause being an improvement in the water-supply. The theory, Dr. Parkes thinks, will explain some of the older reported cases of sudden cessation of cholera; as at Breslau in 1832, where the disease declined rapidly after the shutting up of a pump; and he believes that the prevalence of cholera in Russia during extreme cold may be explained by the fact, pointed out by Dr. Routh, that the poorer classes in that country throw out the excreta around their dwellings; and use, for drinking purposes, the snow collected from the same locality. But, while Dr. Parkes accepts the theory of the propagation of cholera by water, he can by no means admit this to be the only means of communication. "At present, the communication through the air appears to be most common: this may, however, be merely from deficient observation."

Some facts render it probable that the poison of yellow fever may be communicated by water; but there is no precise evidence; nor is there any proof of the communication of other zymotic diseases in this way.

After some remarks on diseases of the skin (an epidemic of boils at Frankfort in 1848), diseases of the bones, calculi, goitre, entozoa, and mineral poisoning, caused, or said to be caused, by water, Dr. Parkes sums up in the following conclusions.

"1. An endemic of diarrhoea, in a community, is almost always owing either to impure air, impure water, or bad food. If it affects a number of persons suddenly, it is probably owing to one of the last two causes, and, if it extends over many families, almost certainly to water. But, as the cause of impurity may be transient, it is not always easy to find experimental proof.

"2. Diarrhoea or dysentery, constantly affecting a community, or returning periodically at certain times of the year, is far more likely to be produced by bad water than by any other cause.

"3. A very sudden and localised outbreak, of either typhoid fever or cholera, is almost certainly owing to introduction of the poison by water.

"4. The same fact holds good in cases of malarious fever: and, especially if the cases are very grave, a possible introduction by water should be carefully inquired into.

"5. The prevalence of Lumbrici, Guinea-worm, or

*Bothriocephalus latus*, should always excite suspicions of the bathing and drinking water." (P. 63.)

The second chapter is commenced with an abstract of the Army Regulations on the subject of Air and Ventilation; and Dr. Parkes then proceeds to speak of the quantity of air required for healthy adult men, for sick men, and for lighted rooms; the composition of the air; the various impurities contained in it, both ordinarily and under special circumstances; of fermentative or septic conditions of the atmosphere; of methods of purifying the air; and of diseases produced by impurities in air.

Under the last head, Dr. Parkes gives a brief analysis of the effects produced by the different impurities on health. At the same time, he observes that our knowledge on this point is as yet imperfect; and that, when impure air does not produce any striking disease, its influence is liable to be overlooked.

"We now know that, unless the specific cause be present, no mere foulness of air will produce a specific disease. The evidences of impairment of health are a larger proportion of ill health—i.e., of days lost from sickness in the year—than under other circumstances; an increase in the severity of many diseases, which though not caused, are influenced by impure air; and a higher rate of mortality especially among children, whose delicate frames always give us the best test of the effect both of food and air. In many cases, accurate statistical inquiries on a large scale can alone prove what may be in reality a serious depreciation of general health." (P. 84.)

In the analysis referred to, Dr. Parkes first enumerates *suspended matters*. First among these come mineral substances: in speaking of which, the author refers to the diseases produced from this source in potters, steel-grinders, button-makers, pin-makers, and other artisans. Next come the germs of infusoria, fungi, etc.; and, in regard to this point, the author refers to the researches of Schroeder, Pasteur, and Davaine—especially the observations of the latter on the propagation of spleen-disease in sheep by the multiplication of *bacteria* that have been diffused through the air—as possibly calculated to throw light on the propagation of disease. But, at present, "it can scarcely be said that this subject has passed out of the realms of conjecture." In the next class, that of organic matters, Dr. Parkes places first the *materies morbi* of the specific diseases. What is the exact form of this, and whether it is always contained (as in small-pox) in the matters thrown off from the body, or is produced by putrefactive changes in such matters, is unknown; but Dr. Parkes believes that it is often combined with or condensed in the water of the atmosphere.

"The specific poisons manifestly differ in the ease with which they are oxidised and destroyed. The poison of typhus exanthematicus is very readily got rid of by free ventilation, by means of which it must be at once diluted and oxidised, so that a few feet give, under such circumstances, sufficient protection. This is the case also with the poison of oriental plague; while, on the other hand, the poisons of small-pox and scarlet-fever will spread in spite of very free ventilation, and retain their power of causing the same disease for a long time; even, it may be, for weeks, or, in the case of scarlet-fever, for months. In the case of malaria, the process of oxidation must be slow, since the poison can certainly be carried for many hundred yards. The poison of cholera also, it is supposed, can be blown by the

winds for some distance; but the most recent observations on its mode of spread render it probable that the portability of the poison in this way has been overrated." (P. 87.)

But it is not only the specific poisons that are conveyed in this way. There can be no doubt, Dr. Parkes observes, that purulent and granular ophthalmia, erysipelas, and hospital gangrene, are very frequently communicated through the direct transference of pus, etc., by means of towels, sponges, and dressings; but

"Another mode of transference is by the passage into the atmosphere of disintegrating pus-cells and putrefying organic particles; and hence the great effect of free ventilation in military ophthalmia (Stromeyer) and in erysipelas or hospital gangrene. In both these diseases, great evaporation from the wall or floor seems to aid the diffusion, either by giving a great degree of humidity, or in some other way." (P. 87.)

The author next speaks of the effects of *gaseous matters*; enumerating under this head carbonic acid, carbonic oxide, sulphuretted hydrogen, carburetted hydrogen, ammoniacal vapours, sulphurous acid gas, hydrochloric acid vapour, and bisulphide of carbon.

Under the next subsection—the effect of air impure from substances always coexisting—Dr. Parkes notices air rendered impure by respiration, by exhalation from the sick, by combustion, and by sewage gas; the effect of sewer air on the general population; emanations from faecal matter thrown on the ground, and from streams polluted by faecal matter; the effect of manure manufactories; the air of graveyards; the effluvia from decomposing animals; the air of brick-fields, cement-works, etc.; the air of marshes; and unknown conditions of the atmosphere producing disease.

The effect of sewage gas is discussed both in regard to men working in sewers, and to the general population. Men who work in non-infected sewers were said by Thackrah to be not subject to disease; and this statement was confirmed by Parent-Duchâtelet. But Dr. Parkes, analysing and criticising the facts adduced by Parent-Duchâtelet, arrives at an opposite conclusion—a large proportion of the men having suffered from ophthalmia, bilious and cerebral disorders, diarrhoea, colic, jaundice, etc. As to the effect of sewer-air on the general population, Dr. Parkes has no doubt that its inhalation is productive of much mischief; and he believes "that the class of affections arising from this cause will be found to be essentially connected with derangement of the digestive rather than of the pulmonary system." As to the important and much debated question, Whether typhoid fever is produced by the emanations arising from faecal decomposition, Dr. Parkes does not offer a decided opinion. He gives in outline some of the data on which the arguments on both sides have been founded; and says:

"The view which best meets all the facts is that sewage air, *per se*, does not produce the specific lesion of Peyer's patches, which is the anatomical sign of typhoid fever, but that sewers afford the channels of propagation when the specific poison of typhoid, derived from the stools, finds its way into them. At the same time, it must be confessed that this conclusion is not based on such complete evidence as should alone content us; and that the spontaneous origin of true typhoid fever from simple sewage matter is neither completely disproved, nor

is evidence wanting which seems to indicate such an origin. That the effluvia from the typhoid stools will produce typhoid fever seems to be certain; and a good case is given by Riecke. The evacuations of a typhoid patient were placed in an out-house, the upper room of which had an unceiled floor. Two men who had no intercourse whatever with the patient, and never entered the house, but who slept in the upper room, were attacked, and at the same time." (Pp. 97-8.)

The probable effects of sewer-air on the general population, Dr. Parkes enumerates as being

"Diarrhoea, bilious disorders, often with febrile symptoms; dyspepsia, general *malaise*, and anæmia; all these being affections of digestion or sanguification; typhoid fever is also intimately connected with sewage emanations, either being their direct result, or, more probably, being caused by specific products mixed with the sewage. In addition, sewer-air aggravates most decidedly the severity of all the exanthemata, hospital gangrene, and puerperal fever (Rigby), and probably has an injurious effect on all other cases." (P. 98.)

Under the head of Unknown Conditions of the Atmosphere, Dr. Parkes refers to a remarkable case related by Dr. Mayer. The greater part of the inmates of a school at Ulm, consisting of sixty or seventy boys, were seized on a warm day in May with giddiness, headache, nausea, shivering, trembling of the limbs, and sometimes fainting. The attack recurred the next day. The room was enclosed by walls, which were covered with fungous vegetation and salts from the mortar; the sudden warm weather had produced fermentation, and the substances generated accumulated in the confined space, and affected the inmates. Removal to pure air cured the disease.

In the third chapter, Dr. Parkes describes the various means that have been proposed for effecting Ventilation by natural and by artificial means; and concludes with a section on the relative value of the two systems. Neither, he says, can be selected in preference to all others. In temperate climates, generally, natural ventilation is the best. But, in the tropics, with a stagnant and warm air, and in temperate climates under certain circumstances—as where there are many small rooms, or where sudden assemblages of people take place, mechanical means must be employed. Whether, in such case, extraction of the air or propulsion be the best, is a question on which opposite opinions have been expressed by equally competent authorities. Dr. Parkes says that the special conditions of the case must determine the choice, and that the amount and method of distribution must be considered rather than the source of the moving power.

"On the whole, the plans of ventilating and warming by hot water pipes, and Van Hecke's plan, are cheaper than the method by propulsion by means of a large fan; but the latter gives us a method which is more under engineering control, and is better adapted for hot climates when it is desired to cool the air." (P. 123.)

In the fourth chapter, on Examination of the Air and of the Sufficiency of Ventilation, Dr. Parkes describes the method of measuring cubic space, of estimating the direction and rate of movement of air in rooms, and the processes to be followed in the microscopic and chemical examination of air. As an example of the varied knowledge which the author



considers that an army medical officer should possess, we may notice that in this chapter, *inter alia*, Dr. Parkes gives brief rules for determining the areas of the circle, ellipse, rectangle, parallelogram, trapezium, trapezoid, triangle, and segment of a circle; the circumference of a circle and of an ellipse; the diameter of a circle; and the cubic capacity of the cube, cone, cylinder, parallelopiped, dome, sphere, as well as of the bell-tent and hospital *marquee*.

[To be continued.]

## British Medical Journal.

SATURDAY, DECEMBER 10TH, 1864.

### THE NEW INDIAN MEDICAL WARRANT.

A NEW Warrant having been promulgated by the Secretary of State for India, with many protestations, on his part, of the immense benefits which will accrue to the Indian Medical Service therefrom, it becomes necessary for those interested in that service to examine carefully its provisions.

The historical notice, at the commencement, shows us that, while Sir C. Wood has been for many years fully aware that some fresh arrangements had been rendered urgently necessary by the abolition of the East India Company's Government, he has been disabled from carrying out his designs, through differences of opinion, at one time between himself and the Secretary for War, at another time between himself and the House of Commons.

It is impossible to say what might have been the effect of the "amalgamation" of the Indian with the British Medical Service; but not so with his second scheme, that of providing India with a Medical Department chosen simply at his own discretion; or, as he terms it, a "medical staff corps for each Presidency." The construction put by the community upon this proposal, that it involved the abandonment of the system of competition, led to a wide-spread conviction that it would be unsafe to leave the selection of medical officers, who might or might not possess qualifications of the highest order, to the caprice of the Secretary of State. Therefore, it appears that this third scheme, that of the "system of an entirely separate service, as heretofore", has been forced upon him. The universal dissatisfaction with which the previous essay of the same high functionary, ushered into the world with high sound only a few months ago (May 16, 1864), was received throughout India, may indicate to us, that it has been only the influence of a public opinion very decidedly pronounced that has prevented the final consummation of measures tending still further to depress the Indian Medical Service.

The *primâ facie* intention of the present despatch is to give assurance to all who may be now in, or

who may hereafter enter, the Department, that, while their duties will be much the same as heretofore, the pecuniary advantages and position accruing to them will in no case be on a lower, and in many points will be on a higher, scale than before.

The principal points adverted to are three—Pay, Pension, and Position. As far as we can at present judge, there are many advantages proffered as regards *Pay*. For all grades, the pay proper will be no less than the aggregate of pay and other allowances which were formerly granted. Those entering the service, as well as those whom a few years' subordinate duty will entitle to an independent charge, will have enough to support them. On all occasions of such charges, or of distinct staff appointments, the different items of pay and allowances will be given in a consolidated form; but the present incumbents will, in no case, be allowed to suffer. With regard to future incumbents, the specification is not so distinct; but if the local authorities carry out fairly the provisions of this Warrant, we may reasonably conclude that those medical officers who now enter the service will receive pay adequate for their comfortable support; and such as will enable them, if they are married, to provide, to a certain extent, for their families. The pay for the unemployed—*i.e.*, for those who are on leave—is raised to an amount far above the former allowance; which, indeed, was cruelly insufficient. In some cases, it will have become doubled. In this particular, justice has been very tardily accorded.

The *Retiring Pensions* are fixed at rates moderate indeed, but probably as high as can be expected, for those who retire after their first period of service is over. For others, the rate rises proportionably; and it has been, apparently, the object of Government to secure, by means of prospectively high pensions as well as present pay, the services of those who have been many years in India, and whose experience and matured judgment may be supposed to render their continued action in executive and administrative employments more valuable year by year; while the temporary tenure of even the highest posts will prevent the Department from being encumbered by those whom age and protracted Indian residence may have rendered unfit for even superintending functions. For the future, there will be *no augmentation of income to the retired from any medical retiring funds*; and, although provision to a certain extent will be made by Government for widows and orphans, it is evident that the married men must incur much greater sacrifices from their own incomes than before, in order that their families may be supported in a manner adequate to their own position.

Looking to all these circumstances, it seems to us, that the pecuniary advantages held out to the medical aspirant are not by any means of an extravagant character. We trust that they may prove sufficient

to reimburse him for his previous expensive outlay, and for his arduous career in a burning climate.

As regards the *Position* of the medical officer, we think that there can be no ground for complaint. In fact, in some respects, it appears to contrast advantageously with that of the British Medical Service. But whether we look to pay, pension, or position, the British medical officer can have no ground of complaint or of envy: for we apprehend that it will be always in the power of the most meritorious graduates of the schools, whether they have passed through the system of preparation at Netley or not, to elect the Indian appointments. It remains to be seen whether young men of the highest qualifications will be tempted to forego the advantage of seeing service all over the world, of frequent change of scene, of society, etc., in order to embrace the more restricted and monotonous, but certainly more lucrative, career of the Indian surgeon. In either case, we fear that, at any rate, as regards relative rank, the medical officer may be in an uncomfortable minority, compared with the favourites of the Horse Guards.

We trust that Sir C. Wood means well; but we cannot place implicit confidence in the professions and promises of any of the present generation of Home Ministers. We remember how vast and well-founded were the expectations of the profession, consequent upon the issue of the Royal Warrant of 1858, and how sadly but surely we were doomed to lasting disappointment. It will need all the firmness of the Viceroy and other controlling authorities in India to insure the carrying out all these provisions of the new Warrant in their integrity. For the present, we will content ourselves with the self-evident proposition that, in such a case as this, in which the lives and interests of our European and Indian fellow-subjects are at stake, nothing can be more wasteful than a grinding economy, nothing more economical than a just liberality. It may be doubted whether a system of amalgamation of the two services might not have proved advantageous. At any rate, we cannot concede any weight to the arguments said by Sir C. Wood to have been offered by the War Secretary, in opposition to the plan proposed by the former.

Supposing a highly educated and disciplined British medical officer chose, after some years of regimental duty, to take up for a time the duties of surgeon to a native regiment, or a civil station, or a jail, or those of a professor at a medical college, or of member of a sanitary commission, we cannot think that he will become in any way disqualified from the performance of medico-military duty. On the contrary, we think that the variety of employment will have enlarged his mind so much that, should the exigencies of the service demand his presence with the army, he will practise military medi-

cine and surgery less as a specialty. He will be enabled to bring to bear upon the welfare of the soldier, the hygienic plans and improvements he has been carrying into operation, in his native hospitals, his jails, his towns. His mingled experience in treating military and civil populations, native and European, will have fitted him the better for the somewhat more restricted charge of the diseases, identical in their nature, but the most specially fatal to the Europeans of a regiment. A surgeon who has supplemented his regimental experience by studying for some years the various aspects of fevers, dysenteries, cholera, etc., among native troops and European immigrants, will be all the better able to treat the fevers, dysenteries, etc., which may prevail, perhaps epidemically, in any portion of the European army with which he may be called upon to do duty. His operative experience will probably have been tenfold. The statement that he would have had "no experience in the prevention of disease", is directly contrary to the fact. His experience, if it have lain in one of the large towns, will probably have been an hundredfold. As for the War-Office suggestion, that a surgeon, during his temporary absence from the European portion of the army, might lose the habits of military subordination, drilled into him by his "continuous military training secured under the present system of the Army Medical Department," the only meaning we can gather from it is, that the War-Office intends, in conjunction with the Horse Guards, to keep the British medical officers completely under their thumbs, so that they shall, at all times, to use the words in the fifth paragraph of Sir C. Wood's despatch, "easily bend themselves to the practice of subordination required from a regimental officer of inferior rank."

#### OUR OWN BRETHREN.

AN action in the Court of Exchequer was last week brought against Mr. Davies, a gentleman practising in Surrey, for unskilfully treating a case of purulent ophthalmia, by which a child lost the sight of its left eye. The judge, when the plaintiff's case was stated, naively asked "what the case was"; and the jury quickly answered the question by giving a verdict for Mr. Davies, without calling upon any of his witnesses. In the opinion, therefore, of judge and jury, there was no evidence whatever of any negligence or unskilful treatment on the part of Mr. Davies. How then came it, that Mr. Davies was brought into a court of justice? We fear we must answer the question, as we have had so often to answer it before, by saying that he has to thank some one or other of what are called his professional brothers for the injury done him. What a lamentable commentary cases of this kind are upon that theory of brotherly love, high professional sentiment and cour-



tesy, and of the probity and dignity, of our calling, of which we hear so much in the abstract, and in the annual addresses of our medical schools! Any impartial medical man, who reads the account of the case here alluded to, and who knows the difficulties, etc., which encircle a medical man's daily practice, will at once admit that to impute blame to Mr. Davies for the results of this case is unwarrantable. Whilst Mr. Davies is attending the case (as the mother of the child tells us),

"A medical man named Maybury called on business. I asked him if he would come upstairs and see the child. He wished to go away without saying anything; but I begged of him in charity and mercy to tell me if the defendant was doing right. He said, if Mr. Davies was in the room, he should say what he said now, that the child had been shamefully used, and what the child wanted was a lotion. I sent over the next day to Mr. Maybury, and obtained the lotion. I used it all day and night of the following day. The defendant's assistant called on the day I had the lotion, and used the ointment again. On the following day, the defendant came; but I would not let him use the ointment. I made no complaint to the defendant of his treatment until Mr. Maybury said that the child had been most scandalously treated. I did not consider Mr. Maybury was in attendance, but treated his attendance as a favour to me.

"Mr. Maybury stated, he first saw the child at the earnest solicitation of Mrs. Wright. He refused to interfere; but, at the mother's request, he sent two scruples of sulphate of alum and potash in six ounces of distilled water, and directed to be injected into the eyes, syringing out the matter every half-hour until the eyes were thoroughly cleansed of the matter. When cross-examined, he said that the treatment he found fault with was in leaving the eye with matter within it, which would in a short time be destructive to its vision. He did say that the treatment was scandalous; but he did not mean by that the defendant was a scandalous man."

No one can read this evidence without noting that Mr. Maybury transgressed the laws of etiquette, in the first place, in giving his opinion and supplying medicines in a case which he knew was under the charge of another medical man. And, in the second place, no one can doubt that his observation to the mother, that the treatment of Mr. Davies was "scandalous", was the cause of this unjustifiable action being brought against Mr. Davies. Nothing can justify Mr. Maybury's remark to the mother; it is completely without excuse, and justly brings Mr. Maybury under the severe censure of his professional brethren. What Mr. Maybury has done is this: he has put Mr. Davies to great pain, great trouble, and, we doubt not, great expense. He may possibly even have seriously injured him in practice. And he has done all this contrary to the sense of the judge and jury, and of the medical profession.

At another page of the JOURNAL will be found a letter from Dr. Hartshorne, which requires a few comments under this head. This letter, we regret to say, tells of another instance in which a medical man is injured through the interference of his professional brother. Judging from the facts as there related,

we must say that Mr. Thursfield would have only acted in accordance with the ordinary rules of professional etiquette, if he had refused to take the case out of Dr. Hartshorne's hands. Taking charge of the case under the circumstances, was his first error. His next was, to say the least of it, an exhibition of very great want of delicacy. He should have been the very last person to appear in the witness-box for the purpose of criticising Dr. Hartshorne's charges. It is, indeed, most lamentable to find a medical brother and neighbour practitioner so ready to give his influence and aid in the reduction of a manifestly most equitable charge. Does a barrister return his fees because the case is withdrawn? Does a London surgeon reduce his fee for an operation because the patient dies soon afterwards? Sad, most sad, is it to find our profession thus paraded in a court of justice. Here is a county-court judge who appreciates the value of a professional man's services, and is ready to do him full justice; but is actually prevented (as it would appear) so doing through the interference of a professional man's professional brother. The injury, in such a case as this, done to the individual is not slight; but infinitely greater is the injury done to the whole professional body. How can we expect the public to set a due value on our services, when some one of ourselves is ready to come forward and publicly declare that a most moderate charge made by his professional brother is a charge which ought not to be allowed? Whoever plays a part in such a proceeding manifestly assists in the lowering of his profession in the estimation of the world, and at the same time does an act of great unkindness and injustice to his professional neighbour. We often accuse the public of injustice and ingratitude. Let us reflect how much of this injustice and ingratitude is due to our own conduct—to conduct of the kind here described.

A NEW medical periodical, entitled the *Nederlandsch Archief voor Genees- en Natuurkunde* (Dutch Archives of Medical and Natural Science) has just appeared, under the editorship of Drs. Donders and Koster. The first number contains papers on the Diffuse New Formation of Connective Tissue, with Reference also to Elephantiasis, by Dr. Koster; on Diseases of the Heart and Arteries, and the Use of the Sphygmograph, by Dr. Brondgeest; on Muscular Action and the Development of Heat, in Relation to Food, and also on the Operation of Mydriatics and Myotics, by Dr. Donders; as well as some minor communications and selections from Dutch professional literature. The *Nederlandsch Archief* is announced to form a yearly volume of from thirty to thirty-six sheets (8vo), with plates and woodcuts; and will appear in four or more parts.

THE Medical Association of France is mainly, we might say wholly, a species of "Provident Fund". Its very title shows its character: "Association Générale de Prévoyance et de Secours Mutuel des Médecins de France." A very large portion of its funds consists of donations and legacies which have been made to it, and not by members of the profession only. The Emperor, for example, gives to it annually 1,000 *francs*. Then, again, the *préfets* of different departments make annual donations to the local branches. We would, moreover, call the especial attention of our wealthy brethren in this country to the large sums of money which have been given by French medical celebrities to this Provident Fund, called the Medical Association of France. Surely such an example might well be followed; and we doubt not that it will be so by the medical celebrities of our own country in reference to our own Provident Fund. Many of our brethren have already warmly answered the appeal made to their generosity. For the French Benevolent Fund—the Medical Association of France—we find donations of the following size: from Dr. Aronsohn, 2,000 *francs*; Dr. Desmarres, 1,500; M. and Mme. Andral, 2,000; Mme. Tonnellé, widow, 2,000; Dr. Bertin, 500; MM. Brun, Rayer, Civiale, De Boismont, each 1,000 *francs*; and a very large number of smaller legacies. We find even amongst the donors the name of Sir C. Locock. The success of this French Provident Fund, called the French Medical Association of Mutual Help and Providence, augurs well in favour of the success of our own Provident Fund.

OUR readers will be pleased to hear that a new Branch of the British Medical Association has been established at Newcastle. A full report of the proceedings will be found at another page.

HOMŒOPATHY, according to a paper by Dr. H. King in the last number of the *Dublin Quarterly Journal of Medical Science*, occupies a position in New York which we trust it will never attain in this country. Its followers have a College—the "New York Homœopathic Medical College"; and the State has granted to this institution the right to confer the title of M.D. The students of this College are by a special Act admitted to the practice of the Bellevue Hospital—there, of course, to cull from legitimate medicine so much as will suit the globulistic art, and to deride the rest. The number of graduates at the last "commencement" was twenty-six. Not content with thus obtaining a legal position, the New York homœopaths have forced themselves, resistance notwithstanding, by the aid of a legal decision, on the county medical societies. As a result of this favoured state of homœopathy, Dr. King believes that

"A larger proportion of regular physicians would

be found willing to meet these irregulars in consultation in New York than in our large cities. And such is, we believe, the fact. For example, a Woman's Hospital on a large scale, on Hahnemannian principles, is in contemplation; and the printed circulars announce that Dr. Carnochan has accepted the position of consulting surgeon to the projected institution."

Truly, there is much room for improvement in New York, both among the public who so liberally patronise globulism, and among those members of the medical profession who ought to know and to act better than so to countenance the follies of the homœopaths, as inevitably to strengthen their position.

WE deeply regret to have to announce the death of Dr. Kirkes, the accomplished physician of St. Bartholomew's Hospital. He was carried off by pneumonia, after only a few days' illness.

M. Küchenmeister has, he says, communicated small-pox to a sheep through the respiratory organs. He made a sheep breathe, during one hour, through the shirt worn by a small-pox patient, who had vesicles around the umbilicus, for twelve hours. Five days afterwards, the animal showed signs of fever; and three days later, a variolous eruption appeared, and was well marked on the inner side of the thighs. He concludes, from this experiment, that there exists a free volatile contagious miasm, which is formed in the body, and is separated even before the suppuration of the pustules occurs; and that this miasm may be dried and converted into a fixed contagious body, capable of attachment to linen, etc.

A Bordeaux *pharmacien*—M. Guyot-Dennecy—makes a pharmacological suggestion worthy of attention and trial.

He remarked, that the antiasthmatic nitre-fumigations used in asthma, as ordinarily prepared with paper, burn imperfectly and slowly, and produce much irritation of the mucous membranes. He therefore proposes to substitute for the paper the fresh leaves of belladonna, tobacco, digitalis, and all such species of leaves, provided they are large and thick. The stalk is placed in a solution of nitrate of potash (10 per 100); and, in the course of twenty-four hours, the leaf is found saturated with the nitrate. When thoroughly dried, they burn as well as the paper, and produce none of its irritating effects; so, at least, says the *pharmacien*.

"Animal Magnetism", which appears to have died out in this country, has cropped up in Vienna. A first-rate *artiste* in this line is thus announced.

"An Ecstatic Somnambulist. Fräulein Filomena Gavazzi is a pretty, saucy, blooming Italian, the very opposite of the ordinary official, pale, thin, bloodless somnambulists. The fräulein exceeds all her predecessors in dexterity and art. Her absolute or apparent want of feeling when her arm was traversed by a needle, when strong ammonia was brought to her nose, etc., were master-strokes of art."



## Association Intelligence.

### FORMATION OF A NORTHERN BRANCH.

A MEETING of medical practitioners resident in Northumberland and Durham was held in the Library of the Infirmary, Newcastle-on-Tyne, on December 1st, for the purpose of establishing a Branch for the two counties of the British Medical Association. Dr. WHITE was called on to preside; and there was a numerous attendance of medical gentlemen, including the following: Drs. Charlton, Humble, Gibb, and Philipson, and Mr. R. Clarke, of Newcastle-upon-Tyne; Dr. Gibson, of Birtley; Dr. Cossar, of Hurworth; Dr. Mackintosh, of Dinsdale Park; Dr. Pyle, of Sunderland; Messrs. Bennett, of Gateshead; Jobson and Thwaites, of Bishop Auckland; Lynch, of Blyth; Blackett, of Durham; Curry, of East Rain-ton; Smith, of Houghton-le-Spring; and Heffernan, of Whitworth.

The CHAIRMAN said he felt very proud of the position in which they had placed him that day at the initiatory meeting for forming a Branch of an Association, which he thought would be of the most extensive benefit to the profession generally. He should have said very little more upon the subject, knowing that all those around him were well acquainted with the principles of the British Medical Association; but as he saw around him some friends from the country, he thought he could not advance the cause they all had in view more than by saying a few words on the subject, which might be diffused and circulated by those gentlemen amongst others who were not so intimately acquainted with the subject. It might be mentioned that this institution consisted of over 2400 members, and that the Association was now in a most flourishing condition. [*Hear, hear.*] When they considered what an enormous influence such an Association must exercise if they all co-operated together, it must be apparent to any man that it was his interest to join it. At the last meeting of the Association, in Cambridge, a Provident Society was originated in connection with it, for the benefit of the more unfortunate and unlucky members of the profession. [*Hear, hear.*] He was quite sure that, if such a project could be successfully carried out, it would constitute one of the most beneficial schemes ever contemplated. After alluding to the enormous and often badly remunerated labours of medical men, especially in the northern counties, the chairman pointed out the advantages that would accrue to the country members that had not access to such a library as that in which they were then met, by becoming members of the Association, as they would receive a copy of its valuable JOURNAL, which was published every week. [*Hear.*] Now, that JOURNAL of itself was an enormous advantage; for, if they took the value of it at 6d., which of course it would be worth, it would represent 26s. in the year: thus giving them 26s. for their guinea subscription at once. [*Hear, hear.*] He believed they had commenced in a very auspicious manner; and he could not close those few observations without stating that but for the untiring energy and perseverance, the skill and business talent of their friend, Dr. Philipson, they would not have arrived at the present satisfactory stage of their proceedings. [*Loud cheers.*]

Dr. CHARLTON proposed the first resolution; and he did it with great pleasure, as he now saw a possi-

bility of the realisation of that which had been the earnest desire of his heart, and that was that a Branch of the Medical Association of Great Britain should be founded here. [*Applause.*] He was, perhaps, the oldest member in that room of the British Medical Association; having, more than twenty years ago, attended its meetings, and having given the anniversary address in Sheffield in 1845. Since that time, circumstances had prevented him from joining the Association, and co-operating with it. Those circumstances were those which he now saw were about to be removed by that meeting; namely, that then there was no Branch of the Association here, and that he was an almost isolated member in the North. Now, however, that Newcastle was becoming a centre itself, he hailed this movement with great joy, and he saw every prospect of its fulfilment. At one period, he thought that the establishment of such a Branch might interfere with their Pathological Society; but he was now satisfied that this would not be the case in any respect. By having a Branch in the north, Northumberland and Durham would have the power of being represented on the Council of the Association, and by that means they could bring their influence to bear upon many important subjects, which had hitherto been neglected by medical men. [*Hear, hear.*] The want of union amongst them had been the great cause of the want of influence of medical men. He moved the following resolution—

"That a Branch of the British Medical Association be formed, to be called the Northern Branch of the British Medical Association."

Dr. GIBSON (Birtley) seconded the motion, and expressed an opinion that such a Branch would cause the jealousies which existed amongst medical men to disappear, when they would be better able to resist the enemies they had outside.

The motion was carried unanimously.

Mr. JOHN JOBSON (Bishop Auckland), in a few brief observations expressive of his views in favour of the establishment of such a Branch, moved the following resolution:—

"1. The Northern Branch of the British Medical Association includes the members residing in the counties of Northumberland and Durham and adjacent districts.

"2. The objects of the Branch are the drawing together, at stated intervals, the enrolled members of the British Medical Association residing in the locality, the reading of papers, the discussion of strictly professional topics, and the promotion of cordiality by a social dinner, at which meetings, discussions and dinner, every qualified medical man is a welcome visitor.

"3. That in order to carry out the objects of the Branch, there be appointed annually a president, a president-elect, an honorary secretary, who shall also act as treasurer, four other members, who shall constitute a committee of management, two of whom shall be resident in Northumberland and two in Durham; one representative to the General Council for every twenty members of the Branch, and— representatives to the Board of Directors of the Provident Fund for every— members of the Branch.

"4. That a single meeting be held in each year, in the month of June, alternately at Newcastle and Durham, or some other town fixed upon by the committee. That the notice of such meeting contain a list of the papers and subjects to be brought forward; that information of all intended communications be forwarded to the secretary three weeks before the meeting, and that the committee of management have the power to call a special meeting upon emergency.

"5. That any member of the profession wishing to

become a member of the Association and Branch be required to communicate his wish, with the name of his proposers, three in number, to the secretary three weeks previous to the meeting.

"6. That each member of the Branch contribute two shillings and sixpence annually for the expenses of the Branch."

Mr. FRANCIS BENNETT (Gateshead) seconded the motion, which was unanimously adopted.

Dr. HUMBLE said that after the comprehensive remarks already made as to the propriety of establishing a Branch of the British Medical Association in the northern counties, it would be unnecessary to detain the meeting at any length. He would merely observe that, having heard doubts expressed that the promotion of this Branch might clash with the operations of the Medical Society, he had felt it his duty, as chairman of that institution, to make some inquiries; and, finding that the two societies would meet at different periods of the year, and moreover that the Branch would, after next year, not hold its meetings in this town for several years, he at once gave his support to the movement, feeling well assured that, the greater the facilities for intercourse amongst the members of the profession, the greater would be the benefits, not only to the members themselves, but to the community at large. He moved:—

"That the officers of the Branch be Dr. White, president; Sir John Fife, president-elect; Dr. Philipson, secretary and treasurer; and that Dr. Charlton and Dr. Embleton, of Newcastle; Dr. Parker, of Sunderland; and Mr. Hardy, of Byers Green, be the committee."

Dr. COSSAR (Hurworth) seconded the motion, which was carried.

Dr. MACKINTOSH (Dinsdale Park) moved:—

"That the first meeting take place in Newcastle in June, 1865, the date to be fixed by the committee."

Dr. GIBB (Newcastle) and Mr. THWAITES (Bishop Auckland) simultaneously seconded the motion, which was adopted.

Dr. HUMBLE moved a vote of thanks to Dr. Philipson for the exertions he had used in the formation of the Branch.

Dr. MACKINTOSH seconded the motion, which was carried amidst hearty applause.

Dr. PHILIPSON tendered his hearty thanks to those present for the manner in which they had passed the vote to him. He said he felt he could have done very little of himself, if he had not had the countenance and assistance of others in the undertaking. When he became a member of the British Medical Association, he had no idea of a branch being formed here or even in the district, but Mr. Williams (the general secretary) had often expressed to him a desire that there should be more members of the Association in this district. The counties of Northumberland and Durham were very little represented upon the list of members of the British Medical Association. He (Dr. Philipson) communicated this to Dr. White, and steps were taken to bring the matter before the medical profession of the two counties, and various meetings were held from time to time, the result of which was that they decided to call the meeting of that day. He thought that by such a Branch as that they would be much better able to carry out measures for the advantage of the profession than any single individual could be expected to do. He accepted with much pleasure the office of honorary secretary and treasurer of the Branch which had now been formed, and it would always be his endeavour to make the Branch as successful as possible.

Mr. CLARKE (Newcastle) moved a vote of thanks to the chairman for the able manner in which he had discharged the duties of the chair.

Dr. PYLE (Sunderland) seconded the motion, which was carried unanimously.

The CHAIRMAN having briefly replied to the compliment, the proceedings terminated.

The members were afterwards entertained at luncheon by Dr. Charlton, at his residence.

#### SHROPSHIRE ETHICAL BRANCH: ANNUAL MEETING.

THE annual general meeting of the Shropshire Ethical Branch of the Association was held on November 28th, at the Lion Hotel, Shrewsbury; the President, S. B. GWYNN, Esq., in the Chair.

*Resolutions.* The following resolutions were carried unanimously.

1. That the cordial thanks of the meeting be given to the President, Vice-Presidents, Council, Honorary Secretary, and Treasurer, for their valuable services during the past year.

2. That J. R. Humphreys, Esq., be elected President; W. W. Thomas, Esq., and W. M. Beddoes, M.D., Vice-Presidents; and the following gentlemen members of the Council for the ensuing year: H. Fenton, Esq.; J. W. Roe, M.D.; T. Groom, Esq.; S. B. Gwynn, Esq.; and E. Harrison, Esq.

3. That J. R. Humphreys, Esq., W. W. Thomas, Esq., and W. M. Beddoes, M.D., and the Honorary Secretary, be the representatives of the Branch in the General Council for the ensuing year.

4. That P. Cartwright, Esq., be elected to represent this Branch in the Directorate of the Medical Provident Fund.

5. That the best thanks of the meeting be given to the President, S. B. Gwynn, Esq., for the courtesy and ability with which he has conducted the business of the meeting, and for his uniform efforts to promote the honour and interests of the profession.

The members afterwards dined together.

#### BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE second ordinary meeting of the season was held at the York House, Bath, on Thursday, December 1st, at half-past seven o'clock; R. W. FALCONER, M.D., President, in the Chair. There were also present thirty-four members.

The minutes of the last meeting were read and confirmed.

*New Members.* The following gentlemen were proposed and duly elected members of the Association and this Branch:—John Cooke, M.D., Mineral Water Hospital, Bath; and Eubulus Williams, M.D., Clifton.

*Medical Provident Fund.* Dr. FALCONER announced that he had attended the meetings of the Directors of the Medical Provident Fund, and promised to lay before the members, on an early occasion, the scheme which is in course of preparation.

*Papers.* The following papers were read and discussed.

1. Clinical Facts bearing on Broca's Views of the Organ of Articulate Speech. By E. L. Fox, M.D.

2. Case of Hernia. By A. Prichard, Esq.

3. Spasmodic Contraction of Hand: Recovery: following an Epileptic Attack. By R. W. Falconer, M.D.

4. Communited Fracture of Orbital Plate of Frontal Bone. By J. W. Teale, Esq. Mr. Teale also exhibited the patient, who was the subject of entire avulsion of the scalp.

5. Enucleation of Eyes. By F. Mason, Esq.



# Thirty-ninth Annual Meeting

OF THE

## ASSOCIATION OF GERMAN NATURALISTS AND PHYSICIANS

AT GIESSEN.

[Continued from p. 524.]

WHEN the last day of the meeting arrived, the ranks were already much thinned. Surgery met early; and, after a paper by Dr. Rosenthal on Meningitis, Dr. Heine showed a number of valuable preparations from the last Danish war, illustrating the various effects of gunshot wounds. He dwelt more particularly on fractures by small arms, and perforating wounds of joints; and related the history of a number of cases which had been under his care. It appeared again, what has appeared so often, as the result of the study of gunshot wounds, that they are very ugly and dangerous lesions whenever they involve a bone. The Section then voted all the usual thanks to its officers; and the president, Professor Roser of Marburg, closed the fifth and last meeting of the surgeons who participated in the Giessen Congress.

In the Mineralogical Section, Professor Klipstein of Giessen made a communication, on a new occurrence of carbonate of iron in the brown Jurassic formation of Oldendorf in Prussia. He also alluded to the mineral Wavellite, or crystallised phosphate of alumina; and showed that it might be derived from the decomposition of organic matters. Bergrath Dr. Jenzsch made a report on the geological results which has been attained by an expedition made into South Brazil by Lieutenant W. Schultz and Baron O'Byrne, on behalf of the Emperor of Brazil. The travellers described many kinds of rocks; then some deposits of coals; and, lastly, the quartz-fields of South Brazil, with their nuts of crystallised quartz and chalcedony. After a communication, on the Gneiss formations of Saxony, the meetings of the Section were closed.

In the Section for Zoology, the commission for determining the subject for the next prize essay of the Imperial Leopoldino-Caroline Academy, which, at the request of the Academy, had been appointed in a former meeting, reported that they had proposed the following subject: Explanation of the relation between sexual and asexual propagation of insects, by investigation of the various modes of generation of the phytophthires (aphis, coccus, chermes).<sup>\*</sup> The Section next discussed fossil insects and belemnites, supposed to be full of embryos. Professor Leuckart then made a communication on hermaphrodites amongst the bees. They occur to the number of hundreds in some hives. The eyes and mouth resemble more or less those of drones; the antennæ remain similar to those of the workers; the hind legs frequently lose the peculiarities of the workers, and the stinging apparatus is gradually lost; when the lateral

half of the stinging apparatus is lost, a penis appears by the side of the remaining half. The power to produce androgynous bees is inheritable by the successors of queens; but, in subsequent generations, becomes diminished. The generation of these hermaphrodites is explained by Professor Leuckart by the probable assumption that the glandular apparatus communicating with the spermatid receptacle of the queen is imperfectly developed, and that, therefore, the spermiatic fluid does not become fully capable of impregnating, and that this causes a partial development only leading to androgynous malformation. The Zoological Section, amidst great applause, passed a vote of thanks to Professor Leuckart, for his excellent and interesting paper on Ambisexual Bees; and, further, for his great and successful services as "second leader of business" to the Congress. The meetings of this Section thereupon also terminated.

In the Botanical Section, Forester Hartig made some remarks upon the effect of frost upon the roots of plants. He showed that it is necessary to compress the earth upon the roots of newly planted trees very strongly, as when it is loose the frost penetrates to great depth. He also mentioned that, in some trees, the central, or grain-wood, participated in conducting the sap; in others, such as the oak, it did not. Professor Hoffmann made an attempt to prop up the doctrine of panspermia, by showing, under the microscope, a little chain of the shape of torula, probably belonging to penicillium glaucum, and a large stemphylium, which had been obtained from the nose of a person who had before been in a room for one hour. The meeting was unable to listen to all the other announced valuable lectures; and having passed the resolutions dictated by gratitude, was formally closed.

In the Section for Physics, Professor Plücker communicated researches on the spectra of gases; Dr. Greiss, on the fluorescence of vegetable extracts; to which Professor Plücker added, that he had also found extracts of animal matters fluorescent. The meeting was then closed.

In the Section for Chemistry, Dr. Braun demonstrated a new reaction for cobalt, by means of cyanogen and nitrous acid compounds. The reaction could also, in turns, be used for proving the presence of cyanogen or of nitrous acid by means of cobalt. Professor Fresenius reported upon the utility of different hygroscopic substances for the drying of gases. Professor de Vry showed a white crystalline resin from *Podocarpus cupressinus* in Java, which was acid, and which he termed podocarpic acid. He reported that the juice of some palm-trees in Java contained cane-sugar, and promised to become a source for the manufacture of this article. Professor C. Schmidt of Dorpat spoke on the constitution and analysis of meteorites. Professor Erlenmeyer gave the result of his researches on the connection between the glycerine-propyl and allyl series. Professor A. W. Hoffmann exhibited glass plates, with magnificent dendritic figures, obtained by slow crystallisation of solutions of salts, such as sulphates of magnesia, zinc, and iron. They had been produced by M. Kuhlmann of Lille; and this most enterprising manufacturer and well known man of science was going to utilise the figures for various purposes, by taking impressions on soft metal, and producing galvano-plastic imitations of the original crystallisations. The Chemical Section was then closed.

The Section of Medicine listened to a discourse by Dr. Friedmann of Munich, on the sources of insubriety of atmospheric air. It was shown that they could be gases only, and that these entered the blood by the lungs. Dr. Horn of Bremen communicated

<sup>\*</sup> It is to be hoped that the Academy will be more lucky than in former years, when its attempts to its prize essays were so often unsuccessful. On the whole, it appears that the Academy and its prizes are becoming popular in Germany, arising, no doubt, from the anti-entailed nature in which the Academy is governed. The President, unfortunately, grasps the power of the Academy. He is elected by the Abgeordnete Members of Council, which Council replenishes itself by elections from the Fellows, the Fellows having no votes. This is the same condition as that which nearly ruined the fortunes of the College of Physicians of London. When the Academy shall allow the enlarged and now flourishing College, and the "Abgeordnete" shall have gone the way of the "Fellows," we may hope for the venerable body and its prizes. The subject of its next prize should be the question after its own propagation.

the experience which he had collected during an extensive outbreak of scarlet-fever which had occurred at Bremen. It contained no new features excepting the complication with diphtheritis. The discussion then mainly treated of the supervention of diphtheritis upon scarlatina, or the substitution of the latter diseases by the former. After much diffuse conversation regarding the treatment of scarlet-fever, in which anointing with lard, the application of cold wet blankets, or cold dry blankets, or sheets, washing with vinegar under the bed-clothes (to avoid the draught and possible cold), and many other well known procedures, were recommended, or condemned, or admitted with modifications, the meeting passed the usual votes of thanks, and was closed by the president.

Physiology also had another meeting. Dr. Hüter spoke on the cartilage-tissue at the lower margin of the patella of embryos. Dr. Thudichum gave an account of his researches on urochrome, and showed their bearing upon the treatment of uræmia. From the analyses of the entire blood of persons who had died of uræmia, and which never contained more than thirteen grains of urea, he showed that the theory of uræmia which stated it to be caused by retention and decomposition of urea (Frerichs), was untenable. He advocated treatment with alkalies in all cases where the retention of colouring matter could be diagnosed or was probable. He was supported in his views by Professor von Willich of Königsberg. Professor Helmholtz of Munich then delivered a lecture on the Noises and Tones of Contracted Muscles. The muscular murmur has been first studied by Wollaston. Latterly, Haughton has confirmed Wollaston. It is easily heard when the ears are stopped up with both index-fingers; or when the ears are closed with sealing-wax, and the jaws are then moved; or when the whole body is immersed in water. The pitch of the muscular noise corresponds to from twenty-eight to thirty-six vibrations per second of the lower parts of the musical scale. Weaker muscles give lower sounds. Helmholtz determined the capability of the muscles and nerves to transmit the electric current; and, as compared to its capability of transmitting the commands of the will, found it enormous. The will, as stated, causes between twenty-eight and thirty-six contractions, or vibrations; while the electric current could be made to cause 480 contractions per second. The vibrations of the muscle were determined by those of a musical fork inserted into the electrical chain. As the muscle contracts at each opening and closing of the current, and as the musical fork vibrated—i.e., opened and closed—240 times, the muscle contracted 480 times, and the nerve conducted 480 impressions, per second.\* Professor Eckhardt made a communication on the excitation of the salivary secretion by electrical irritation of the peripheral end of the lingual nerve before it enters the lingual ganglion. It was the essence of a dissertation of one of his pupils, and well rendered. Subsequently, the Professor performed the experi-

ment in the Physiological Institute; as, also, another which he had described, concerning the mechanism of the erection of the penis in the dog. The Physiological Section then concluded its meetings, voting thanks to its several officers and benefactors.

Thus closed, at ten o'clock, on Friday, September 23rd, the scientific meetings and discussions of the sections of one of the most memorable congresses of German savans. From the sections, all hastened to the central hall, to be present at the last general meeting, which began at half-past ten A.M. It was announced amidst cheers, that the Director of the town of Hanover, J. Rasch, had sent the following telegraphic message: "The Fortieth Congress of German Naturalists and Physicians will be very welcome in Hanover, in September 1865." It was then repeated, what had already been announced, that Professor Krause had accepted the office of president of the next meeting; and had telegraphed the message, "that the King of Hanover would be glad if the meeting took place in his capital." Therefore, naturalists and physicians of Germany, or of any other country, in September 1865, some, we hope many of us, shall meet at Hanover. As far as I am concerned, unless it rain millstones, or I am otherwise incapacitated—say by an untoward and unreasonable lady-patient, who insists upon being laid up between September 17th and 25th, 1865, or by some other equally professional disappointment, I shall go to Hanover. This being settled, there were four more lectures to go through. How the first one came to be delivered before a mixed assembly, it would baffle the imagination of others to make out unassisted, as much as it has baffled my own. It was a commonplace description of a new mode of making an extract of meat which contains the albumen in solution and can be boiled. The subject properly belonged to the Medical or Pharmaceutical and Chemical Section. As the new extract was subsequently advertised with the names of Dr. Horn of Bremen, inventor, and Mr. J. Toel, apothecary, manufacturer, I found that the lecture had a philanthropic object, which could be attained by everybody at the rate of eighteenpence an ounce. The second lecture was excellent in scope and manner. It was by Dr. Stamm of Berlin, the indefatigable ichneumon of miasmatic snakes; and showed clearly the manner in which epidemics might be annihilated.\* Dr. Stamm evidently produced a great impression, although he had, of course, to speak *sub rosâ*. He was succeeded by Dr. Birnbaum of Giessen, a teacher of the science of agriculture, with a lecture on Liebig's doctrine regarding the robbery of the soil by the process termed agriculture. Ultimately, there was a kind of lecture by Professor Hoffmann, on the dependence of vegetation upon the condition of the soil; in which old propositions contained in his handbook from fifteen years ago were repeated, in a manner which made them even less interesting than they had been when they were the garb of novelty. About twelve o'clock,

\* I used this fact for some considerations on the capabilities of our physical nature and the shortcomings of our metaphysical performances. No doubt, I said to myself, persons who perform extraordinary feats of body transmit impressions of the will with great velocity. Blondin, for example, must be thus gifted. A billiard player, a good shot, a ready reckoner, must each have great capabilities of quick transmission. I came at last back to an old exercise of mine: that of appreciating a great number of things in the shortest possible time, by simply rotating the eyes. I enunciated the educational principle, that we should teach our children to conceive impressions of the will, and transmit impressions of their own or of other people's will with the utmost celerity. It is an immensely useful and practical exercise; and, from my experience, I am sure that it will save many lives, and make many proceedings of life more precise than they are at present.

\* As I have fought through the same topics as Dr. Stamm, I am entitled to say that all his positions were unassailable, and that even should his ideas be before their time, as much as Papin's pot was, they must ultimately be carried out throughout the world. It is necessary that the miasmata caused by filth and ordure should be removed; they can only be constantly removed by being carried to the land; and that this cannot be done in the shape of sewage, common-sense would show, even without the blue-book, "Sewage (Metropolis)", which was issued by a Parliamentary Committee. That the spread of water-closets has to be stayed, the pollution of the rivers of five hundred English towns fully teaches. And that those water-closets which exist in great towns have to be abolished, can be shown to be amongst the necessities of the future. The water-closet is a flagrant violation of the common law of England and every other country; the infection of sewers and the pollution of rivers is the same; and I quite agree with Dr. Stamm, that it cannot anywhere be tolerated.



the programme of lectures was exhausted. The "first leader of business," Professor Wernher, now delivered a short valedictory address; and concluded with proffering the best thanks of the town and university of Giessen for the honour done to them by the Congress. The Geheime-Bergrath Nöggerath of Bonn, who is one of the oldest *habitues* of the Congress meetings, took upon himself the task of summarily thanking the shadow of Oken, the founder, the state of Hesse-Darmstadt, the town of Giessen, the university of Giessen, the leaders of business; and concluded his comprehensive speech with proposing three cheers to his Royal Highness the Grand Duke of Hesse-Darmstadt. Professor Wernher then formally closed the Thirty-ninth Congress of the Naturalists and Physicians of Germany. As the citizens of Giessen and the leaders of business had done all that could be done to ensure success, the unqualified success of this great meeting was to them an especial subject of congratulation. And this and hearty thanks they received in abundance from the hundreds of strangers and friends who dispersed, on the afternoon of that 23rd of September, towards all parts of the German fatherland and other countries of Europe. For the cosmopolitan character of science had been vindicated by visitors from France, England, Belgium, Holland, Sweden, Russia, Hungary, Italy, and even the far East, had sent its representatives to that cheapest of all markets, where you buy treasure for what you value it at, the market of ideas.

## Reports of Societies.

### CAMBRIDGE PHILOSOPHICAL SOCIETY.

NOVEMBER 28TH, 1864.

PROFESSOR THOMPSON in the Chair.

IS THE VERTEBRAL THEORY OF THE SKULL TO BE ABANDONED? BY G. M. HUMPHREY, M.D., F.R.S.

THIS communication was intended, partly, as a reply to the opinion expressed by Professor Huxley, in his lectures on comparative anatomy, that the vertebral hypothesis of the skull has been abolished by the recent discoveries in development. Dr. HUMPHREY commenced by calling attention to the Laws of Uniformity of Plan, and Variety in Detail, which prevail throughout the animal kingdom, and, indeed, throughout the material system, and which the recent discoveries by the microscope have shown to rule over the ultimate structure and formation of all the tissues of the body. The discovery of the illustration of these laws in the plan of cell-formation of the tissues, and in the development of all animal and vegetable structure from the simple cell-form, he regarded as the grandest discovery in physical science that has taken place in our time. Of late years, the attention of anatomists has been much directed to the exemplification of these laws in the vertebrate classes, to tracing the uniformity of plan, especially in the skeleton, through the variety in detail which the members of these classes exhibit. This constitutes the branch of anatomy called "Homology." The general features of the plan upon which vertebrate animals are constructed are clear enough in all of them. Osseous segments, or vertebrae, with neural and visceral processes, enclosing respectively the neural and visceral centres, constitute the trunk, including neck, chest, loins, etc. Probability is in favour of the view propounded by Goethe and Oken, and worked out by Oken and Owen, that the skull falls in with the Law of Uniformity, and corresponds with the rest of the

frame in having a vertebral composition. It is by all anatomists admitted to be segmentally constructed. Most anatomists are agreed as to the number of segments. Ought not, therefore, these segments to be described by the same name as those of which they form a continuation, especially as they bear the same relations to the neural and visceral centres, and the same or nearly similar relations to the nerves and bloodvessels? In their mode of development, too, the segments of the skull show a marked general correspondence with those of the trunk. The *chorda dorsalis*, around which the vertebral centres are formed, extends, at any rate, half way along the base of the skull; and the bodies and arches of the cranial segments are evolved from a continuation of the same embryonic structure—the "vertebral plates"—as the trunk segments. The chief difference being that in the trunk segmentation takes place at an earlier period than in the head. In the trunk, it is observed in the vertebral plates; and these primitive segments are called "protovertebrae." They appear not to exist in the head. The segmentation, however, takes place in the cranium, as soon as ossification begins, even if it does not do so before; and the significance of the protovertebrae as distinctive features between the skull and the trunk is diminished; first, by their being related to the formation of the nerves as much or more than to that of the vertebrae; and, secondly, by their not really corresponding with the vertebrae, each permanent vertebra being formed by a half of two protovertebrae. Dr. Humphrey expatiated on this and other points in the development of the skull, and expressed his decided opinion that the differences between the development of it and of the trunk vertebrae were by no means sufficient to controvert the view—which coincides with the Law of Uniformity, and which is confirmed by the segmental construction of the skull, by the relation of its components to surrounding parts, and by so many fundamental resemblances in development—that the same name may be applied to the segments of the skull and of the trunk, and that the one, as well as the other, consists of vertebrae modified to meet the requirements of the parts in which they are found. He concluded by stating that the greater number of those anatomists to whose observations we are indebted for most of our knowledge of the development of the skull and of the trunk are agreed that the differences between the mode of formation of the segments in the two form no real argument against the vertebral character of either; and he thought stronger reasons must be adduced than had yet been shown before the anatomists could be called upon to abandon the vertebral theory of the skull.

ROYAL SOCIETY. At the annual meeting of this Society on November 30th, the following officers were elected:—*President*, Major-General Sabine, R.A., D.C.L., LL.D. *Treasurer*, W. A. Miller, M.D., LL.D. *Secretaries*, W. Sharpey, M.D., LL.D.; G. G. Stokes, M.A., D.C.L. *Foreign Secretary*, W. H. Miller, M.A. *Other Members of the Council*: J. C. Adams, M.A.; J. Alderson, M.D.; G. Busk, Esq., Sec. L.S.; Col. Sir G. Everest, C.B.; H. Falconer, M.A., M.D.; J. P. Gassiot, Esq.; J. E. Gray, Ph.D.; T. A. Hirst, Ph.D.; Sir H. Holland, Bart, M.D., D.C.L.; H. B. Jones, M.A., M.D.; Sir E. I. Murchison, K.C.B.; W. Odling, M.B.; W. Pole, C.E.; Rev. B. Price, M.A.; Sir J. Rennie, Knt.; Lord Stanley. The medals were awarded as follows:—The Copley medal to Mr. Charles Darwin, F.R.S.; a Royal medal to Mr. Jacob Lockhart Clarke, F.R.S.; a Royal medal to Mr. Warren De La Rue, F.R.S.; and the Rumford medal to Professor John Tyndall, F.R.S.

## Correspondence.

### ASSISTANT-SURGEONS FOR INDIA.

SIR.—I had intended making a few remarks on the despatch of Sir C. Wood, published in the last number of the JOURNAL, but I am so taken aback by your editorial in its favour, that I fear to do more than ask you to publish the present and former rates of retiring pension together, so that people may judge of "the change" which you so "hail" "from its own intrinsic merits."

I do doubt the "sincere gratification" you expect to be evinced by all interested; and I do fear the influence such an article may have on young men ignorant of these matters; nor can I agree with a high authority late of the Indian medical service, "that the despatch of Sir C. Wood seems fully to remove all cause of complaint."

That there has been a slight increase of pay and pension I will admit; but relative rank, the great stumbling-block, remains as it was, with the exception of the two grades of Inspector and Deputy-Inspector Generals. Their rank, Sir C. Wood writes, under the Royal Warrant, is to be considered as substantive rank; but we know from sad experience that, when it suits the views of combatant officers, they will consider our rank as nothing. It is not to be expected they will pay more respect to a despatch from Sir C. Wood than they paid to Her Majesty's Warrant, which they set at naught; so that the Indian medical service is, in that respect, no whit improved.

Promotion to the rank of surgeon in twelve years is undoubtedly a boon, in bringing with it increased pay; but there is against this the great drawback, that in future the Indian medical officer will only have natives to treat (with the exception of a few Europeans attached to native regiments and civil stations); as all European soldiers have been transferred to the British service, and were as quickly as possible taken from our charge.

As to the Royal commissions (and you should be aware that we of the old Company's service held them distinct from the local government commission), I do not see their value. As I said above, they can be set at naught as well as her Majesty's warrant; and until our rank is recognised on all committees, courts of inquiry, and at the mess-table, we are still outsiders, and liable to treatment, which "An Army Medical Officer" styles "derogatory to the profession"; but, to my mind, the treatment is ungentlemanly. No matter what the conduct is at mess, where all are supposed to know how to conduct themselves as gentlemen, without the instruction of the drill sergeant, unless a combatant officer takes notice of it, the medical officer, no matter what his rank, must not interfere; or, if he do, either no notice is taken of him, or he is told he has no authority. On this point of rank, I consider the different deputations to the Duke of Cambridge and Lord de Grey erred in not having an old army officer with them to explain and answer all the objections raised by the Duke and Lord de Grey, with regard to finance and military subordination.

There is not to be a medical fund, as in former days, for the new service; and, when I tell you that the Madras Medical Fund gives its members, on retiring, annuities of £400 a year, independent of the Government pension, I think you will agree with me that the slight increase of pension under the new rules will not compensate for the loss of the medical fund, which also was our widow's pension of

£228:11:5 a year, and our children (according to age) from £20 to £70 a year, to boys till 21, and to girls till death or marriage, with reversionary benefit in the event of widowhood; and when we came home on sick leave, this Fund gave surgeons £108:7:6, and assistant-surgeons £81:7:6, a year. Compare these advantages under the old Company with what is now offered, and say honestly if you believe the terms to be liberal.

In this despatch, there is not a word about furlough pay to Europe. At present, a surgeon gets ten shillings and sixpence a day; and I observe the studied omission of the words so peculiar to our old service, "of privileged furlough and leave of absence as counting for the retiring pension." Not a word of it in this. Every day set down against each pension must be served out in India, as I well know; for, the last time I came home on sick leave, I wanted seven months to complete the period for my pension, and I had to return to India, at my own expense, to serve out these few months, though I offered the Indian Secretary to serve double the time in England. Hence, leave will not count for the retiring pension; though, strange to say, in the British service, sick or private leave counts for pension, and these officers have passage found them to or from India on sick leave. When the new pensions are compared with those of the British service, I still say to aspirants for the red jacket: Choose the British service, until the Indian is not only on an equality in every respect, but superior to the British in pay and pension. Then, and not till then, I say, go to India.

#### Retiring Pensions under Old Rules.

| Yrs. Mos. |                         | £   | s. | d. |
|-----------|-------------------------|-----|----|----|
| 15        | 4 service in India..... | 191 | 12 | 6  |
| 19        | 0 Ditto .....           | 250 | 0  | 0  |
| 22        | 0 Ditto .....           | 300 | 0  | 0  |
| 26        | 0 Ditto .....           | 365 | 0  | 0  |
| 28        | 0 Ditto .....           | 500 | 0  | 0  |
| 31        | 0 Ditto .....           | 700 | 0  | 0  |

#### Retiring Pensions under New Rules.

|    |                         |     |   |   |
|----|-------------------------|-----|---|---|
| 17 | 0 service in India..... | 220 | 0 | 0 |
| 21 | 0 Ditto .....           | 242 | 0 | 0 |
| 24 | 0 Ditto .....           | 365 | 0 | 0 |
| 27 | 0 Ditto .....           | 456 | 0 | 0 |
| 30 | 0 Ditto .....           | 550 | 0 | 0 |

Look on this and that; and honestly advise. Should you require further information, I shall be happy to give it. I am, etc.,

A RETIRED SURGEON-MAJOR, MADRAS ARMY.

December 1864.

### MEDICAL EVIDENCE IN LAW-COURTS.

LETTER FROM F. H. HARTSHORNE, L.R.C.P.Ld.

SIR,—Throughout the kingdom, your editorial censure has suppressed the practice of medical men, upon insufficient data, giving evidence in courts of law against their brethren. I offer, for insertion in our JOURNAL, the particulars of the following case, hoping that you will give such an editorial judgment in the matter that will serve as a pole-star for our guidance in future cases.

Last September a child, six years of age, fell into a thrashing-machine by which the father got his livelihood, and at the shoulder had its arm completely severed from its body. I was called to the case. Having obtained the assistance of another surgeon, Mr. Bartlam, it was decided not to remove the humerus at the shoulder-joint, which I had thought would be necessary; but, dissecting back the lacerated muscles, I saved the bone off at the surgical neck. After some time spent in search of the bone I



lary artery among a mass of bruised and torn muscle, it was safely ligatured, having first in an instant spirted into both our faces, as well as on the wall of the room. The torn nerves and muscles were then removed with the knife; two narrow tongues of skin were made to unite by a suture across nearly the centre of the wound; a rent below the axilla was closed by means of another suture, and the whole covered with wet lint. Either my pupil or myself were with the child a considerable time after the operation, fearing hæmorrhage. Having been asked by the mother what I should charge for the operation, I said that my charge would be five pounds; and that I would attend the child until it was well for that sum. No objection was raised to this charge at that time. Next day I was told, before several persons, that a lady in Brosely had promised to pay my fee of five pounds, and all future charges, upon condition that the child was transferred to Mr. Richard Thursfield's care; otherwise, that the lady would not pay either surgeon. No imputation of want of skill or of neglect was made. Finding that it was clearly understood that, without further attendance, I was to be paid five pounds, I consented to withdraw. Mr. Thursfield visited the child immediately afterwards. At the expiration of the week, I had not received the fee, and therefore sent in the following bill.

|   |          |
|---|----------|
| "To amount of bill delivered for the years 1860, 1862, 1863 . . . . .   | £. s. d. |
| "1864. To medical attendance and medicine for child in January . . .  | 2 7 0    |
| "To removing parts of lacerated nerves and muscles, applying ligature to the axillary artery, sawing off part of the humerus, applying sutures, dressing wound, with attendance and visits, for son, in September . . | 0 11 6   |
|   |          |
|   | 5 0 0    |

7 18 6"

After this, it was intimated to me that the amount charged would be disputed. I therefore put the case into the Madeley County Court. Mr. Walker of Wolverhampton defended the case; and, before it was called on, privately told me that Mr. Thursfield was to appear as a witness against my claim. The sum charged for the operation was the only item disputed. The judge at once recognised the fact that £5 was allowed by the Poor-law Board for an amputation; and remarked, that the arm having been completely severed by the machine did not lessen the amount of skill required, but very likely aggravated the severity of the case; putting to me the question, "If they had been rich, you would have charged more?" Mr. Walker stated that the defence was, that the charge was excessive; and now called Mr. Thursfield as a witness, who stated that he was sent for three or four times before he visited the child, because he did not like to interfere with a brother medical man's practice. The judge then asked him if he did not find that I had rendered similar services to those that are ordinarily required in cases of amputation. Mr. Thursfield answered: "That is an invidious question about a brother medical man." The judge remarked: "Oh, I see, you did not like having to interfere with a brother medical man's practice; but you saw that the wound had been properly done up, so to speak." "Only by hearsay," was Mr. Thursfield's reply. Having read my bill, the judge asked again if he did not see that what was stated there had been done for the child. Pointing to my bill, Mr. Thursfield said: "I did not know what is there stated had been done for the child, until I saw it written upon that paper. It was so inflamed and swollen, I could not tell what had been

done." The judge now asked what, in Mr. Thursfield's opinion, would be a right charge for the case. "In consideration of Cleeton's circumstances, £3 was a sufficient payment," was the reply. To this the judge remarked, that I had already considered their circumstances in making a charge as for a pauper. Mr. Thursfield is the senior surgeon, and has the best practice in this neighbourhood; he is also a magistrate for the borough of Wenlock and high bailiff of the Madeley County Court; therefore the judge could not entirely ignore the opinions of a man in his position, and gave judgment for £4 for the operation, telling me that the deduction was made because I did not subsequently attend the case.

I think your opinion in this matter may be of future use to some of our associates. What is the value of human life to an individual, a family, or socially? What is the fee paid to deliver a felon from a painless and sudden death upon the gallows? and what fee is thought to be right to preserve a tender parent, a loving child, or an honest labourer, from terrible anguish, sudden or perhaps lingering death? We wish to avoid doing injustice, and would like to know what should be the recognised minimum fee for amputation. Is Mr. Thursfield's standard to be accepted? If the public are taught to believe that such services as are given in such serious cases are of little importance and of little worth, where will men be found willing to fit themselves for acting in such emergencies?

Probably the world will never be rid of people with mean principles and ignoble minds; but some remarks, sounding abroad from the high ground you occupy, may produce good results by acting as a barrier to mischievous designs, and confer upon many a lasting boon.

I am, etc.,

FREDERIC H. HAESTHORNE.

Broseley, December 1st, 1864.

## ON RETAINING THE STAFF IN THE BLADDER IN CASES OF LITHOTOMY.

LETTER FROM F. LE GROS CLARK, Esq.

SIR,—My attention has been directed by a former pupil and valued friend of mine, who is well acquainted with my practice in lithotomy, to a paper by Dr. Morris of Spalding, which was published in your JOURNAL of October 29th.

Dr. Morris quotes an operation of mine in favour of his recommendation to retain the staff in the bladder until the stone is removed. I well remember the case referred to, from the fact of its being exceptional. Indeed, it is the only instance which I can recall where I so far deviated from my usual practice as to retain the staff until after I had introduced my forceps and seized the stone. The explanation of my so doing in this case is, that the perineum was of such unusual depth that I could not reach the stone with the forefinger of my left hand; and I therefore left the staff *in situ* until I had secured a hold of the stone or struck it with the forceps; I forget which.

Dr. Morris is quite right in the principle he advocates; viz., that of retaining the staff until no doubt remains of the prostate being sufficiently opened, and the presence and position of the stone ascertained. But this is effectually secured by the introduction of the forefinger, and feeling the stone. Until then the staff should on no account be removed, unless the perineum be too deep for the finger to reach the interior of the bladder. After these points have been ascertained, the presence of the staff becomes an embarrassment to the operator; and it may, especially if not much curved, become entangled with the stones.

Dr. Morris makes another observation on the case in question, which gives me an opportunity of urging on young lithotomists a point of, I think, far more practical importance than that which forms the subject of his paper. He remarks, that "the extraction of the stone (which was by no means large) was a difficult and most tedious affair." I admit that it was so; and to this tediousness I believe this patient, and many others on whom I have operated with much larger stones, owe their subsequent safety and good recovery. I have the stone before me; it is flat and of oval shape, and measures over five inches in its largest, and nearly four in its smallest, circumference. I had seized the stone (as shown by the marks of the forceps) by the edges of its smaller diameter; and thus, when brought to the opening in the prostate, its two projecting extremities were locked, so to speak, inside the gland; and, instead of acting like a wedge, drew down the prostate with it. I could not judge of the shape of the stone, as I had not felt it; but I believed that it was very large, from the extent of surface I could feel between the blades of the forceps. Therefore, instead of loosening my hold, I introduced a straight blunt-pointed bistoury, and divided to a limited extent the right lobe of the prostate. A little more patient traction enabled me to complete the extraction safely.

I cannot too strongly reprobate violence in the extraction of a stone; for it is my firm conviction, that recovery or death depends, in many instances, solely on the patient, or, as it may appear to bystanders, tedious manipulation of the operator in the removal of a large stone.

The principles on which I act in lithotomy are contained in a clinical lecture published in the *Medical Times and Gazette* for November 9th, 1861.

I am, etc., F. LE GROS CLARK.

St. Thomas's Street, Southwark, December 1864.

### THE LATE SIR B. BRODIE'S CROONIAN LECTURES.

LETTER FROM CHARLES HAWKINS, ESQ.

SIR,—Would you allow me to supply an omission in Dr. Robert Lee's paper, read at the Royal Medical and Chirurgical Society, which is reported in your last number? Dr. Lee, in his history of the Croonian lectures on "Muscular Motion," says that one was read in 1811 by Sir Benjamin Brodie, but omits to state that he read one also in 1813 "On the Influence of the Nervous System on the Action of the Muscles in general, and of the Heart in particular." The Council of the Royal Society directed that it should be printed in the *Philosophical Transactions*, but the author requested that the printing should be postponed, and it never was printed. The Council permitted me to copy this communication, and it will appear in the forthcoming edition of the author's works. In this lecture he details a series of experiments he had performed, showing that the heart, when suddenly and completely emptied of blood, continued to act even for a longer time than when it remained with its cavities distended with dark-coloured blood after the cessation of respiration, the contractions of the different parts of it being as regular, as orderly, and as vigorous as when the circulation is still going on; and he was led first to reject the hypothesis of Haller, and refer the contractions of the heart to the nervous influence supplied by the cardiac plexus of nerves, and not to the stimulus of blood on its cavities; and secondly, to apply the same explanation to the movements of other involuntary muscles.

I am, etc.,

CHARLES HAWKINS.

Savile Row.

## Medical News.

UNIVERSITY OF LONDON. M.B. Second Examination, 1864. Examination for Honours.

**First Class. Medicine.**  
Best, Palemon, Scholarship and Gold Medal, University College  
Fairbank, Thomas, Gold Medal, St. Bartholomew's Hospital  
Fox, Edward Lloyd Harries, University College  
Hingston, Charles Albert, St. Bartholomew's Hospital } equal.  
Kempthorne, Henry Law, King's College

**Second Class.**  
Carter, Wm., Charing Cross and St. Thomas's Hospitals } equal.  
Casey, Edward, King's College  
Hooper, John Harward, St. Thomas's Hospital  
Simms, Frederick, King's College

**Third Class.**  
Nunneley, John Albert, Leeds and Guy's Hospital  
Ludlow, Ebenezer, St. Bartholomew's Hospital

**First Class. Midwifery.**  
Fox, Edward L. H., Scholarship and Gold Medal, University College  
Phillips, John Jones, Gold Medal, Guy's Hospital  
Fairbank, Thomas, St. Bartholomew's Hospital

**Second Class.**  
Kempthorne, Henry Law, King's College  
Hingston, Charles Albert, St. Bartholomew's Hospital  
Casey, Edward, King's College  
Carter, Wm., Charing Cross and St. Thomas's Hospitals  
Hooper, John Harward, St. Thomas's Hospital

**Third Class.**  
Ludlow, Ebenezer, St. Bartholomew's Hospital  
Nunneley, John Albert, Leeds and Guy's Hospital

**First Class. Forensic Medicine.**  
Fox, Edward L. H., Scholarship and Gold Medal, University College  
Fairbank, Thomas, Gold Medal, St. Bartholomew's Hospital  
Carter, William, Charing Cross and St. Thomas's Hospitals

**Second Class.**  
Casey, Edward, King's College  
Kempthorne, Henry Law, King's College

**Third Class.**  
Simms, Frederick, King's College  
Hingston, Charles Albert, St. Bartholomew's Hospital  
Ludlow, Ebenezer, St. Bartholomew's Hospital

M.D. Examination, 1864.

Hicks, John Wale, B.A., B.Sc., St. Thomas's Hospital  
Huxley, James Usher, King's College  
Lancaster, Henry Thomas, St. Bartholomew's Hospital  
Miller, John Nicholas, University College  
Moxon, Walter, Guy's Hospital  
Pye-Smith, Philip Henry, B.A. (Gold Medal), Guy's Hospital  
Stevenson, Thomas, Guy's Hospital

UNIVERSITY OF CAMBRIDGE. First M.B. Examination, December 1st. Examined and approved.

Lee, R. J., B.A., Caius College  
Mickle, G., B.A., Clare College

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following members of the College, having undergone the necessary examinations for the Fellowship, on November 22nd, 23rd, and 24th, were reported to have acquitted themselves to the satisfaction of the Court of Examiners; and, at a meeting of the Council, on Nov. 25th, were admitted Fellows of the College.

Baker, William Marrant, Andover, Hants; diploma of membership dated April 16th, 1861  
Bowen, Essex, Birkenhead; June 7, 1860  
Buszard, Frank, Infirmary, Northampton; April 16, 1860  
Maurice, James Blake, Marlborough; April 10, 1861

APOTHECARIES' HALL. On December 1st, the following Licentiates were admitted:—

Appleby, Frederick Henry, East Retford, Notts  
Baker, George Benson, Cross Street, Islington  
Brideoake, Robert Farrar, Leigh, Lancashire  
Butler, Charles Henry, Camborne, Cornwall  
Earle, Robert Charles, Totnes, Devon  
Markby, Thomas, St. George's Hospital  
Owen, Robert Edward, Guy's Hospital  
Tidy, Charles Meymott, The Hollies, Cambridge Heath

At the same Court, the following passed the first examination:—

Duke, John Challen, King's College Hospital  
Ridout, Charles Lyon, St. George's Hospital



## APPOINTMENTS.

## ROYAL NAVY.

LUCAS, Leonard, Esq., Assistant-Surgeon, to the *Royal Adelaide*, for Plymouth Hospital.  
 MOLLOY, Gerald, Esq., Assistant-Surgeon, to the *Royal Adelaide*, for Plymouth Hospital.

VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

FITZGERALD, C. E., M.D., to be Assistant-Surgeon 2nd Administrative Battalion Cinque Ports R.V.

## DEATHS.

COOPER, Richard, Esq., late Surgeon 4th Dragoon Guards, at Club Chambers, on December 4.

MARSTON. On December 2nd, at Southsea, Alice Mabel, infant daughter of J. A. Marston, M.D., Royal Artillery.

MORGAN. On December 5th, at Cheltenham, Elizabeth, widow of the late Hill Morgan, M.D., Bombay Civil Service.

SIEVEKING. On December 3rd, at 17, Manchester Square, Alexander Edward, infant son of \*Edward H. Sieveking, M.D.

THE SOCIAL SCIENCE ASSOCIATION will next year meet either at Sheffield or at Gloucester. Invitations have been received from both those quarters.

APOTHECARIES' HALL AND RAILWAY ENCROACHMENTS. The master and wardens of the Society of Apothecaries are at legal issue with the Chatham and Dover Railway concerning the encroachment of the railway upon their premises in Blackfriars.

SANITARY IMPROVEMENT IN LIVERPOOL. £100,000 is about to be expended in Liverpool on the improvement of the dwellings of the poor and the destruction of filthy courts, under the able superintendence of Dr. Trench, the medical officer of health, whose services are recompensed by the salary £750 a year.

FLINT IMPLEMENTS. M. Bourdain has discovered two new deposits of flint implements—one in Paris itself, and the other an hour's distance. The gravel in the squares, promenades, and gardens of the city, the author says, contain archeological treasures—a prodigious quantity of arrow-heads and such like.

UNIVERSITY COLLEGE, LONDON. Free admission has been granted for three or four students of the London Missionary Society, to attend the medical and surgical practice of the hospital, with a view to their acquiring such medical knowledge as may most likely be useful to them in their missionary life.

BEQUESTS. The paymaster-general has been authorised to pay to University College Hospital the sum of £375, portion of a bequest made by the late Madame de Lilly to her Majesty for the benefit of the poor in London. Miss Ann Cranstoun Fryer, formerly of Hammersmith, but late of Reading, has bequeathed to the Royal Infirmary, Edinburgh, a legacy of £6,000.

SIGNEUR MARINI has come to Paris with his preparations, and anybody who wishes may see at the Hotel Mazarin a round table entirely made up of a sort of mosaic of petrified brain, blood, bile, etc. He has dried or mummified limbs, which, by injecting, he can make to look as if they came from a recently deceased body. The process may have an interest for people of morbid tastes, like Dr. Van Butchell, who, I think it was, kept his two dead wives in his bedroom. He married a third, who insisted on the interment of her rivals before she would go to the altar. (*Chemical News*.)

ODONTOLOGICAL SOCIETY. At the meeting of this Society on December 5th, E. Saunders, Esq., in the chair, a paper was read by Dr. Kingsley, an American dentist, on the treatment of cleft palate, and artificial velum. The author spoke especially of congenital cleft palate, which, he contended, was not

hereditary, although several instances might occur in the same family. After some remarks on the physiological action of the palate in deglutition and articulation, he referred to staphyloraphy; regarding which he acknowledged that better results, as regards union, were obtained in this country than in America, and that some improvement in speech was no doubt obtained. Great improvement was, however, rarely obtained, because the new septum was too small, and the movements of the palate were interfered with by the operation. He thought that the prospect of a merely limited improvement did not justify the performance of a tedious operation; and read extracts from the works of Mr. Fergusson and Mr. Pollock, to shew the imperfect results of staphyloraphy. He then described an artificial velum which he had designed, and exhibited several specimens, which, he said, were duplicates of appliances actually made for and worn by his patients. The instrument was ingeniously formed of vulcanised India-rubber, the parts being arranged so as to move on each other, and to obey the direction given by the muscles. It was fixed to the teeth—natural or artificial—by gold wire or other convenient material. In order to make it fit accurately, a model of the parts was first taken in plaster of Paris. He had never known its introduction to produce irritation. The result had been great improvement in speech, so that sometimes the deformity could not be detected at the end of six months. An animated discussion followed, which was led by the President, who exhibited some metallic artificial palates which he had designed many years ago. He had always found much difficulty in overcoming irritation. Mr. Sercombe would give the author full credit for his invention, but must differ from him as to the hereditary nature of the deformity. He had in all instances been able to trace inheritance—sometimes not directly, but in collateral branches. He had commenced the treatment of fissured palate ten years ago, and had seen many cases. At first he designed a rather complicated apparatus; but this he gradually simplified, until he produced the obturator which he at present used. The necessary qualities of an artificial palate were, that it should not be readily put out of order, or, if disarranged, that it should be easily restored; that it should fulfil all the objects required; and that it should be of durable material. His apparatus, he believed, had all these qualities. A gentleman under his care had worn one since 1857. The apparatus was moreover so simple that nineteen out of twenty dentists could construct it. Dr. Kingsley's apparatus somewhat resembled one brought forward by Stearns in 1845, which was very difficult of application. It (Dr. Kingsley's apparatus) was adapted for those rare cases in which the soft palate was so far destroyed that no moveable part remained; but it was complicated, and probably would not last above three years. Mr. Pollock regarded the results of staphyloraphy as by no means satisfactory; improvement of articulation was effected in some cases, but it was uncertain. Mr. Sercombe's apparatus was a very useful one, and, as he had seen, could be adapted even to children. Dr. Kingsley's apparatus was no doubt most useful in cases of loss of palate from ulceration; and there Mr. Sercombe's apparatus had also been very useful. An important point was the expense of the instrument; Dr. Kingsley's apparatus was expensive, and therefore not likely to come into use for hospital patients. Some remarks also were made by Mr. Bell, Mr. A. Coleman, and Mr. Mason. The general impression appeared to be, that Dr. Kingsley's apparatus was a most ingenious one; but that it was too complicated and wanting in durability to be brought into general use.

## OPERATION DAYS AT THE HOSPITALS.

|              |   |
|--------------|---|
| MONDAY.....  | Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.   |
| TUESDAY....  | Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.   |
| WEDNESDAY... | St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  |
| THURSDAY.... | St. George's, 1 P.M.—Central London Ophthalmic 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  |
| FRIDAY.....  | Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  |
| SATURDAY.... | St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M. |

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

|            |  |
|------------|--|
| MONDAY.    | Medical Society of London, 8 P.M.  |
| TUESDAY.   | Royal Medical and Chirurgical Society. Ballot at 8 P.M. 8.30 P.M.: Dr. Piddock, "On the Causes and Prevention of Infant Mortality"; Mr. J. Morgan, "Fleur of the Blum communicating with the Bladder";—Ethnological.—Zoological. |
| WEDNESDAY. | Microscopical.   |
| THURSDAY.  | Harveian Society of London, 8 P.M. Mr. Victor De Meire, "On Syphilitic Affections of the Nails";—Zoological.—Royal, Luncheon.—Chemical.  |

## TO CORRESPONDENTS.

\* All letters and communications for the JOURNAL to be addressed to the Editor, 37, Great Queen St., Lincoln's Inn Fields, W.C.

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

CHIEF EDITORS, who wish notice to be taken of their communications, should either trace them with their names—or of course, not less usually for publication.

1. **REMARKS.**—In last week's number, at page 629, column 1, line 27, "The description given above is applicable only to extreme cases of fatal cases," and "and" is an inadequate expression of the meaning.

1. **W.**—The Officers of the London Society at Burlington House, Piccadilly. The secretaries are Messrs. Bush and Currier.

1. **O.**—The statement is exactly correct. The Journal referred to, as meeting able of the Association, does not disdain to cater for a part of the aid of a homoeopathic practitioners pen. The London path in question is assuredly not a member of the British Medical Association.

THE DUBLIN QUARTERLY JOURNAL OF MEDICAL SCIENCE for November contains the following original communications:—Contributions to the Volumetric Analysis of Urine, by Dr. A. W. Wallace; An Unusual Form of Dislocation of the Hip-joint, by Mr. G. R. Symes; Notes on Medicine and Surgery, by Dr. P. C. Smyly; Remarks on the Hebrew Catalogue of Skin-Diseases, by Dr. T. W. Delecher; A Simple Object-Finder for Students' Microscopes, by Dr. T. Powell; Notes of a Visit to the Medical Institutions of New York, by Dr. H. King; Granular Swelling or Demian Empion of the Testicle in Infants, by Dr. C. Fleming; Case of Hæmorrhoids treated by Fecal Vomiting, successfully treated by Glycerium, by Mr. J. M. Lunn. The number also contains Reviews of Radcliffe on Epilepsy; Miss Nightingale's Notes on Hospitals; the Medical and Chirurgical Transactions; Marshall, Spence, etc., on the Introduction of Cascarilla into India; Neuman and Macdonald on Medicine, Medical or Surgical Progress; Recent Works on Ophthalmology; New French Medical Dictionaries, etc.; as well as the Proceedings of the Dublin Pathological, Dublin Obstetrical, and the Cork Medical and Surgical Societies.

H. S.—In our opinion, Captain Clarke, who prosecuted the scoundrels Henery and Co., has no claim at all upon the profession, that they should assist him by contributing to the payment of his legal expenses. Captain Clarke has paid for his weakness in throwing himself into such hands, instead of seeking proper medical advice. That he prosecuted the quacks, we may be very sure, was not done from any philanthropic motives; but to relieve himself from an insufferable persecution. If people commit acts of folly, we may commiserate their weakness; but we are not called upon to pay hard-earned cash to recuperate them for the consequences of their folly. The proper persons to assist him in his difficulty are the innumerable victims who have already suffered in the hands of the rascals. We would recommend our contemporary, who patronises a subscription for Captain Clarke, to open its pages for the reception of subscriptions from anonymous victims of "Our Silent Friends".

P. S.—For a second time, and in a leading article, the journal in question has published the following:—"A new Provident Fund," it says, "just started, would certainly have ended in the same way, had the official Journal of the Association had its own way, and had not Mr. Carter of Stroud enlisted our assistance in opening that Fund to all the profession." This statement, we again repeat, is not only false, but it is directly opposed to even a possibility of truth. The author of it neither does nor can produce the shadow of a proof, that we have ever said one word or uttered the smallest hint against the proposition of opening the Fund to the whole profession. Any honest man who reads lines so brazenly asserted, would naturally believe they were true. We therefore, in self defence, are forced once again to say, that they are a pure invention, or fabrication.

AN INDIAN ARMY MEDICAL OFFICER writes:—"I have heard the opinions of several of the seniors of the Indian Medical Service. They are all well pleased with the promises of the Despatch. We must not, however, forget that sometimes a controlling authority puts a different interpretation on what seems at first sight clear enough."

THE USE OF THE TITLE OF DR.—A correspondent asks: "Is a gentleman with L.R.C.P. (Lond.) entitled to place Dr. on his door-plate and card?"

[The question asked has been again and again the subject of journal-discussion. We apprehend that no one can be prevented by law from prefixing Dr. to his name. The London College of Physicians refuses to give the title of Dr. to any Licentiate not possessed of a recognised doctorate-diploma; but custom or practice or courtesy seems at present inclined to give the title of Dr. to a physician, though he possess no doctor's diploma.]

WRIGHT P. DAVIES.—A correspondent writes: "I beg to call your attention to a case reported in the Times of December 2nd last, where Mr. Davies, another of these actions brought against a medical man for supposed maltreatment in an infant suffering from purulent ophthalmia, in which professional jealousies are brought into play, and the witnesses for the complainant acted most unfairly against the defendant."

THE GREEN TESTIMONIAL FUND.—SIR: The following subscriptions have been further received on behalf of the above Fund:—J. A. Leighton, Esq. (Wetherby, 5s.); J. P. Knott, Esq. (Towster), 5s.; W. D., 5s.; Robert King, Esq. (Uxbridge), per Dr. Luce, 5s.; G. H. Macdonald (Uxbridge), per Dr. Luce, £1 1; Dr. Luce (Uxbridge), £1 1.

Amount previously announced, £105 2 6. Received at the Lancet office, £6 14.

I am, etc., ROBERT FOWLER, M.D.,  
Treasurer and Hon. Sec.

145, Bishopsgate Street Without, December 7th, 1864.

MR. TALLEY.—SIR: I herewith enclose you a portion of the *Lancet Gazette* for Friday last, in which the self-constituted champion of the medical profession announces an increase of his family.

TALLEY.—Nov. 29, at Beaconsfield, the wife of William Talley, solicitor, of a daughter. No doctors."

COMMUNICATIONS have been received from:—Mr T. SPENCER WELLS; Dr. J. G. PARSONS; VERITAS; THE SECRETARIES OF THE HARVEIAN SOCIETY, Mr. E. WILSON; Dr. R. FOWLER; AN ASSOCIATE, J. W. W.; Mr. T. POPE; Dr. E. WAKES; Mr. J. VASE SOLMONS; Mr. R. HARRISON; Dr. MACKENZIE; THE ASSISTANT SECRETARY OF THE ROYAL SOCIETY; Dr. B. HARRISON; Mr. F. MASON; Mr. R. S. FOWLER; Mr. J. R. HUMPHREYS; Mr. WILLIAM LILTON; Mr. HARTSHORNE; Mr. R. H. MILDRE; Mr. RICHARD GRITTS; Dr. J. GARDNER; Mr. CAUDLE; Mr. CHARLES HARRIS; Mr. FRANK WILSON; THE HONORARY SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr. CULLEN; Mr. PICK; Mr. W. TRESLERY; M. S.; and Mr. F. W. PITCHCO.



# Addresses and Papers

READ AT

## THE THIRTY-SECOND ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

[Held in CAMBRIDGE, AUGUST 3rd, 4th, and 5th, 1864.]

### THE RADICAL CURE OF EXTREME DIVERGENT STRABISMUS.

By J. VOSE SOLOMON, F.R.C.S., Birmingham.

WHEN a patient affected with divergent strabismus is unable—let his muscular efforts be ever so great—to do more than bring his eye to the centre, the case comes under the category of *extreme divergent strabismus*. This condition may result from several causes; but I propose confining myself in the present paper to the consideration of instances where the deformity has had its origin either in a too free division of the tendon of the inner rectus muscle and the subconjunctival fascia, by Dieffenbach's operation for squint; or in paralysis of the inner rectus, unconnected with tumour of the orbit.

When the squint is referrible to a badly performed operation for the relief of strabismus convergens, the tendon of the inner rectus has acquired attachment far behind its normal position, and the muscle, having become contracted and shortened, is no longer competent to antagonise its opponent. The deformity which results from this loss of balance is increased by the caruncle and semilunar fold of the conjunctiva having fallen so far backwards as to be invisible, which gives an apparent increase of size to the eye, and a markedly vacant expression to one side of the face.

With a view to remedy one or more of these defects, several plans have been tried by surgeons.

1. The excision of a large portion of the *external rectus* muscle. This, when successful, would leave the eye motionless, and is therefore most objectionable.

2. The removal of a portion of the conjunctiva between the semilunar fold and inner edge of the cornea, and then bringing the cut edges together by sutures—this, when successful as regards the position of the caruncle and semilunar membrane, fails to cure the divergence.

3. A *third* plan has been to excise the belly of the inner rectus, and then bring its cut ends together with sutures, the operation being concluded by a tenotomy of the external rectus. Of this method, invented and practised by Mr. Critchett, it may be sufficient to note, that in the hands of that able surgeon, the globe sometimes suppurated. Moreover, it is not a physiological proceeding, as normal convergence is not restored by it.

4. A *fourth* method, I have been told, since I practised my own operation, consists in dissecting up the inner rectus muscle, and then fixing the eye by ligatures in a much converged position; the internal squint which is induced by the operation being subsequently treated by a subconjunctival tenotomy. (Von Gräfe.) The objections to this plan are, that inversion cannot always be maintained for sufficient time to insure a more forward adhesion of the tendon, without which no benefit would accrue; another and very serious objection is derived from the liability of ligatures so placed, when tense, to

irritate the cornea, and if not tense they are useless; and, under the most favourable circumstances, the muscle does not acquire its normal length.

The indications to be fulfilled by any proceeding undertaken for the radical cure of *extreme divergent strabismus*, when a result of previous tenotomy of the inner rectus, are: to give the eye a central position; to restore the length and the proper point of attachment to the adductor muscle, thereby insuring balance of the opposed muscular forces and permitting normal convergence.

The division of the attachments of the inner rectus, with its conjunctiva and subjacent fascia (in a manner to be presently described), and of the tendon of the external rectus, suffices to place the eyeball in the axis of the orbit.

The great difficulty consists in protecting and fixing the globe until the inner rectus obtains a proper attachment to it. Careful study of the subject led me to institute in persons who are in good health the following plan.

Anæsthesia having been induced by chloroform, and the lids separated widely by a self-acting speculum, the *first step* of the operation is commenced by making a flap of the parts which contain the inner rectus. To effect this a rather long perpendicular incision is made at about half a line from the inner margin of the cornea, down to the sclerotica; with curved scissors the inner side of that membrane is dissected bare. In order to make the flap come forward and over the cornea, two short incisions are practised through the extremities of the first incision, towards the nose. (Fig. 1.)

*Second Step.* As soon as it is found that the flap will reach, on being stretched, the vertical diameter of the cornea—when the eyeball is in the axis of the orbit—the external rectus is divided by a rather long perpendicular incision, just behind the insertion of its tendon. (Fig. 2.) The conjunctiva, which intervenes between this incision and the outer margin of the cornea, is reflected forwards, and made to form a *second flap*.

*Third Step.* The two flaps are united over the vertical diameter of the cornea by sutures, three of which are generally sufficient, one in the centre, one just above and one below the upper and lower margin of the cornea. (Fig. 3.)\*

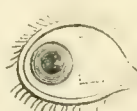


Fig. 1.



Fig. 2.



Fig. 3.

The eye now occupies the axis of the orbit; the *inner rectus* is stretched to its utmost limit, and the tendon placed over the most favourable site for adhesion to the sclerotica; the external rectus retracts, and if the power of moving the globe inwards and outwards be at this stage tested, it will be found still to exist, but to a slight degree only, the antagonism being about equal.

The *after treatment* aims at securing the immediate union of the inner flap, and the preservation of the nutrition of the globe. These indications are fulfilled by keeping both eyes closed, and with the temples covered for about ten days by jeweller's cotton wool. The central suture is removed on the second or third day so as to obviate *corneitis*. Inflammatory chemosis, should it occur, must be met by the application of two, three, or four leeches to the temple, and pain

\* For these sketches, I am indebted to my friend and former pupil, Mr. Arthur Bracy.

in the eye by the internal use of morphia. If there be much puro-mucous discharge the local use of astringents is necessary. At the end of three weeks the conjunctiva should be trimmed of any uneven processes.

I have practised this method for upwards of four years with great success.

These stereoscopic portraits exhibit the state of a lady before and after the treatment. It will be observed that the deformity was great, and although not possessed of good features, the patient's expression has been much improved. Not a vestige of outward squint remains, the power of convergence being normal.\*

In cases of *paralysis* it will be obvious that careful selection and a special regard to their pathology would be required before recourse be made to surgical treatment.

I have applied the operation in the present year to an instance in which the inner rectus of both eyes and the levator palpebræ of the left were paralysed; and there was also paresis of the other muscles which are supplied by the third nerve.

The patient, a man aged twenty-one, applied at the hospital in October 1863, complaining of fixed pain in the head, vertigo, and of affection of the muscles mentioned. A seton was put in the neck and some medicine given. He attended afterwards once only in that year, and was not again seen till February 5th, 1864. He then stated that the seton had cured the pain in the head, and at the end of six weeks from the time of its insertion he had taken it out. As a careful examination failed to discover disease or disorder of any organ except that of the paralysed muscles and their nerves, I determined, on February 15th, 1864, to accede to the request of the patient by making an attempt to place the right eye in the centre. At this date the right eye read minion type (Jäger's No. 4) with clearness, and by the aid of a 20-inch double convex glass, brilliant, or Jäger's No. 1. The left eye he stated was always imperfect; with it he read double pica (Jäger's No. 14). The pupils were of equal size, and very inactive to the usual tests, but contracted well with Calabar bean. The right pupil had a diameter of three lines, and when diminished to one half that size by Calabar bean paper, the eye read, without the aid of spectacles, brilliant type, or Jäger's No. 1, indicating that the retina was perfectly healthy.

The position of the eyeballs before operation is well shown in the left eye of the woodcut, and the result of the treatment represented by the right in the same drawing. In consequence of the palsy of the left eyelid it was necessary to elevate it with the thumb while the photograph was being taken. (Fig. 4.) The power of convergence possessed by the oper-

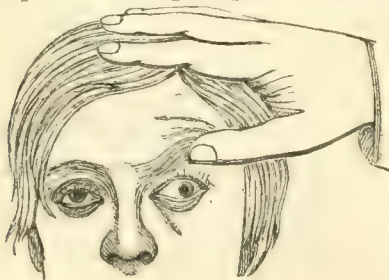


Fig. 4.

\* It has not been considered necessary to reproduce the portraits in this place, inasmuch as the accompanying woodcut of a man affected with paralysis of the muscles supplied by the third nerve, demonstrates the value of the treatment.

ated eye is shown in the other drawing. (Fig. 5.) Both of these sketches have been taken from photographs, which I have brought with me, and will hand to the President for your inspection. It will be found on comparing them that the artist has been strictly accurate in his magnified representations.

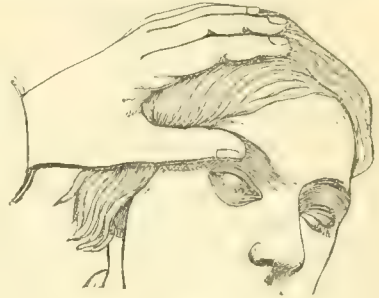


Fig. 5.

In this instance the first incision was made to extend over the inner edge of the corneo-sclerotic union, and a piece of the inner flap was cut off, also about one-fourth of the external rectus muscle.

The case affords not only an illustration of the advantage obtained by the method which I advocate, but an excellent example of the great power of recovery which is evinced by paralysed muscles (the nervous centres being healthy) after the action of their antagonists has been lessened, or entirely removed.

The more numerous and striking instances of this physiological fact present themselves in the domain of orthopaedic surgery, and upon them has been based, by Mr. Barwell, an entirely new method of treatment, in which tenotomy is dispensed with.

In conclusion, permit me, Mr. President, to say that I am fully sensible of the numerous points of interest which a more full clinical description of the last case would afford for discussion; I have, however, felt constrained, out of deference to the exigencies of this meeting in respect to time, and to the title of my paper, to confine the details to such points as were sufficient to illustrate the particular method of operating which you have permitted me to make known at this meeting of the Association, in your august and time-honoured seat of learning, science, and religion.

The operation appears to me to offer the following advantages:—

1. In healthy subjects it is devoid of danger. No injury to vision has followed its performance.
2. The external squint is completely removed.
3. It restores a normal degree of convergence; hence improves the optical accommodation.
4. It has been successful in a case where the deformity was dependent on paralysis of the inner rectus muscle, and has restored a considerable amount of convergence.

[Since reading this paper, I have devised a plan by which, I believe, the contracted muscle may be extended to its natural length, and the outer flaps of conjunctiva dispensed with.]

**USE OF PHARMACEUTISTS.** An ill-informed pharmacist is more dangerous than an ignorant physician; for the former may cause the death of the patient directly, while the physician has a *lightning-conductor* in the way of his homicidal prescriptions; and this lightning conductor is the pharmacist. (*Le Moniteur Scientifique.*)



# Original Communications.

## THE TREATMENT OF ECZEMA.

By E. H. MEADE, F.R.C.S., Senior Surgeon to the  
Bradford Infirmary.

AFTER perusing the learned paper on the Nature, the Varieties, and the Treatment of Eczema, by Mr. Erasmus Wilson, which was read at Cambridge, and published in the *BRITISH MEDICAL JOURNAL* of November 19th, I felt that the last division of the subject was much less satisfactorily treated of than the earlier ones; for, while the description of the nature and varieties of the disease was very graphic, the directions regarding the treatment of this common and troublesome affection were too general and indecisive.

In the treatment of this as of most other complaints, it is doubtless necessary, as Mr. Wilson says, to look to the constitution of our patient, and endeavour to correct any disordered function that may be present, or remove any predisposing causes; but is this sufficient to cure a case of eczema? May we not often succeed in strengthening or otherwise improving the general health, and yet find the disease as troublesome as ever? Are there no remedies which may be looked upon in some measure as specifics? I believe there are; but the only one recommended in this light by Mr. E. Wilson is arsenic; and though the efficacy of this tonic is undoubtedly great in many forms of cutaneous disease (the true scaly affections, for instance), I have little or no faith in its curative powers in cases of eczema, and have almost always found it disappoint my expectations.

Though eczema (as Mr. E. Wilson truly says) occurs in various forms and degrees, arises apparently from various causes, is met with in very different constitutions, and breaks out at all ages, yet I have mostly found it yield to the same remedies; and the most efficacious ones in my experience are bichloride of mercury and antimony. I quite agree with Mr. E. Wilson, that eczema is generally a disease of debility; but though it mostly arises in weak states of constitution, it is in its own essence inflammatory; and therefore, while the strength is supported by generous diet, an alterative remedy, like bichloride of mercury, which is so generally efficacious in chronic inflammatory complaints, may be advantageously given, and even combined with tonics.

With regard to antimony, it is less generally applicable in eczema than corrosive sublimate, but it will sometimes be found very useful; and in some obstinate cases, I have seen these two remedies exceedingly efficacious in combination. The form of the disease in which antimony administered singly seems more particularly applicable, is that in which it is acute in its character, and occurs in persons of a full inflammatory habit, who are also, perhaps, subject to gout or rheumatism. Tartar emetic given here, in combination with aperient salines and magnesia, will often cure the complaint very quickly.

We frequently see very annoying cases of eczema in oldish people, in whom the skin round the anus and about the scrotum or labia is affected. I have found the combination of bichloride of mercury and tartar emetic in the same mixture particularly useful in these cases, and sometimes cure them in a week or two, when they had resisted other treatment for two or three years. The dose of bichloride which

I generally find sufficient is one-sixteenth of a grain, given three times a day, with one-eighth of a grain of antimony; in some demulcent mixture, as decoction of sarsaparilla or dulcamara.

Eczema very frequently occurs in infants, breaking out soon after birth, and becoming aggravated as teething commences. Most of these cases have, I believe, an hereditary origin—one or the other parent having a disposition to the complaint. These young subjects are mostly weak, and require strengthening treatment. Unless they are suckled by a strong mother or wet-nurse, they should have good beef-tea or broth given them, in addition to the milk; and have little or no farinaceous food. These are cases which will be especially benefited by corrosive sublimate. It must be given in very small doses, and continued a long time; it may be taken with occasional intermissions for months together, with advantage. A sixtieth of a grain, or even less, in a very young child, taken twice a day, with a little fluid extract of sarsaparilla and glycerine (which is a very good demulcent), will mostly check the complaint. Should the bowels be at all irritated by the mercury, a little opium may be combined with it.

In recommending bichloride of mercury so strongly as a remedy for eczema, I do not wish it to be inferred that I am bringing forward anything new; for I believe that this medicine has been long and largely used in this complaint, by the medical officers of the London Hospital for the Diseases of the Skin; and, knowing this, I was the more surprised that it was not even mentioned by Mr. Wilson in his paper. Having long used it in my own practice, I am anxious to bear testimony to its efficacy; and can recommend those of my medical brethren who are not yet acquainted with its virtues in the treatment of eczema, to give it a fair trial, both in combination with antimony and without it.

In the few remarks which I have made upon the treatment of eczema, I have made no allusion to external applications. I now mention them, for the purpose of saying that I by no means underrate their importance; but, as I am not professing to write a paper on the general treatment of this complaint, but only wishing to call attention to one or two particular remedies, I think it unnecessary to enter fully into the subject.

## NOTES ON HERNIA.

By JOHN THOMPSON, M.D., F.R.C.S., Bideford.

HERNIA in the adult, everywhere a very common ailment, is, I think, more than usually frequent in this neighbourhood. I draw this conclusion from a comparison of the out-patients attending at a London hospital, and a similar number of patients of the same class, coming under my observation here. The difference in the occupation of the two will, I think, account for the variation. In town, a large amount of labour is in character sedentary, but here the principal occupations require active exertion of the lower extremities and abdominal muscles.

The oblique inguinal is the most frequent in occurrence; the femoral, beyond all comparison, the most liable to strangulation, and, when strangulated, the most difficult to reduce.

Of fourteen cases of strangulated hernia occurring in private practice under my treatment or observation, which required operation, thirteen were femoral, and but one inguinal (this was in a male); eight of the femoral were in females, five in males. In one of the male cases the sac contained omentum only; in all the rest in both sexes, intestine. Taking into consideration that femoral hernia is so frequent in

women, and relatively so infrequent in men, these facts support the opinion, that the danger of strangulation in femoral hernia of the male is greater than in any other variety of the disease.

Generally speaking, the symptoms of a hernia are sufficient to make the patient suspicious of the nature of his ailment; but not infrequently, especially in small femoral hernia, he has no idea of the serious nature of his case, and thus strangulation may occur, and inflammation be set up, before professional aid is sought. I deem it a matter of the greatest practical importance, to have a lively suspicion of the possible existence of a strangulated hernia, in all cases of complete intestinal obstruction attended with marked constitutional disturbance.

The patient may perhaps deny that he has a rupture, and attribute his complaint to a cold taken on a particular occasion, or to some injudicious feeding, etc., the statement being made in perfect good faith; when, nevertheless, the whole malady is due to some little intestinal protrusion unnoticed by the sufferer.

I knew a case where a young woman sent for her surgeon, in consequence of what she thought was a casual bilious attack with obstruction of the bowels. He made on his visit due inquiry for rupture, but was assured, most positively, that none existed; as he was still suspicious, he requested permission to make an examination, which was refused, on the ground of its being unnecessary; nevertheless, he persisted in the request, and on being eventually allowed to examine, he found a hernia; this he succeeded in reducing, and at once relieved the patient of her distress.

I was asked by a surgeon to visit a person suffering from strangulated femoral hernia, who had been under treatment for two days, without either the patient or his attendant being aware of the nature of the case, which was, however, discovered by the medical man before he requested my attendance. In this case reduction was found impracticable; I operated successfully, and the man recovered.

A patient of my own, who had frequently suffered from partial suppression of urine, and was accustomed in consequence to place herself under my care, applied to me for what she termed an attack of her old complaint. On my visiting her, she informed me that she had a good deal of pain about her back and loins, and also in the lower part of her bowels; that she had been rather sick, and had scarcely passed any urine for several days. She was at this time sitting by the fire in the downstairs sitting-room. I prescribed the usual remedies, but heard next day that she had not been relieved, in fact, thought herself worse, and desired another visit from me, which I accordingly gave her. She was now in bed; had eructation, retching, and occasional vomiting, the matters ejected having the first character of stercoraceous vomit. I questioned her respecting the existence of rupture; she denied having any, but, on my making an examination, I found a very small femoral hernia in the right groin; it was too small to be noticed unless under actual manipulation. I succeeded in reducing it, and in consequence at once removed the most formidable part of her disease. Here the hernia had probably become strangulated by the forcible efforts at urination; in all probability a rupture had existed for some time, as the patient, after the reduction had been effected, admitted having felt a sensation of bearing down in the part on some previous occasions.

I was sent for by a young farmer, who stated in his message that his "bowels were swollen like a barrel, and that nothing had passed through him for many days." On my visit I found eructation, retching, and occasional vomiting, with pain of the abdo-

men and swelling. He was quite unconscious of having a rupture, but, on my making an examination, I found a little femoral hernia, which was thought by the patient to be merely a swelling of the glands. I took great trouble to reduce this, and was ably assisted by a professional friend, but could not succeed. I therefore operated; and, though strangulation had evidently existed four days, the patient made an excellent recovery.

Dr. Watson speaks of two cases of supposed idiopathic peritonitis to which he was called, that, on examination, he discovered to be produced by strangulated hernia, and in both instances death resulted. He expresses his sensation to have been that of "horror," when, by examination, he discovered the true cause of the disease, and felt that it was too late to attempt an operation.

What are usually called the constitutional symptoms of hernia, are more strictly speaking the indications of acute intestinal obstruction from a mechanical cause; they suggest hernia, because this is beyond all comparison the most frequent cause of such obstruction.

I was called to a gentleman suffering from complete constipation, with some pain of a dull character in his abdomen, attended with eructation, retching, and vomiting. He had had incomplete hernia of the right side, for which he had worn a truss; but at this time there was no protrusion, and the finger could be pushed up the right inguinal canal to a considerable distance. His general symptoms exceedingly resembled those of strangulated hernia, and my observation was confirmed by two leading practitioners in the district, who attended with me in consultation. Our efforts to relieve our patient failed, and after death we found that complete obstruction of the cæcum, caused by extremely hardened feces, presenting distinct facets, had been the cause of the illness with its symptoms and results. This gentleman was homœopathic in his views, and averse to taking aperient medicine; he could scarcely be said to have had for a long time a thorough evacuation of the larger intestines. The tympanitic state of the abdomen, during the illness, prevented our diagnosing by percussion with accuracy.

In another patient, presenting during his illness very similar symptoms, which had the same unfortunate result, the obstruction was caused by a stricture contraction of the small intestines. The absence of heat of skin, quick pulse, and other indications of febrile action, was very marked in both these cases, during the first days of illness. Compared with hernia as a cause of obstruction, such instances are, however, very exceptional.

It has often struck me that, among the first symptoms of intestinal obstruction from hernia, much stress may be laid on the peculiar eructation and retching, which precede the vomiting, and, when this occurs, commonly form the first part of the process which terminates in ejection of the contents of the stomach. They differ considerably from the eructations and retchings which sometimes occur in dyspepsia and other complaints, in having a particularly diaphragmatic character, and suggesting a combination of retch and hiccup, forming together a more determined and spasmodic act, than is observed where they attend in other diseases. The pain attending the obstruction varies, but is not commonly very severe till inflammation ensues.

Where strangulation is produced concurrently with the hernia, and the latter is femoral, most intense suffering may occur at once. Mr. Lawrence made this observation long since, in his *Treatise on Hernia*, and I give the following case in illustration of its truth. A man in this town was employed as porter



to a steam-boat; and one night, at about eleven o'clock, when he had nearly completed his labour, he was seized with agonising pain in his bowels, and had to be taken at once to his home. Some one shortly after came and informed me of the man's suffering; and, as I knew him to be fond of drink, I suspected that he was suffering from some imprudence in his potations. I sent him some medicine containing full doses of tincture of opium, and requested to be informed of the effect. During the night I was called, and found him in agony; he could not stay in bed, but walked the room making loud expressive wailing. As he was a strong manly fellow, in fact an old wrestler, he would not have been the man thus to complain had not his suffering been intense. I soon questioned him about swelling in the groin, and also examined for it, when I found a glandular enlargement, and under it a little femoral hernia. The man said the glands had been enlarged for some time, but he had not known of the other swelling before. I attempted to reduce this hernia, using bleeding, the warm bath, and the taxis, but to no purpose, and in the morning a medical friend came to my assistance, and I at once operated. We found the glands in the groin much enlarged, and it was not easy at once to find the sac, so that my friend almost suspected that I had made an error, but it was not so, for a very small hernia existed. I opened the sac, divided the stricture, returned the intestine, and the man was relieved; he subsequently recovered without a bad symptom.

The length of time after strangulation, before inflammation of the abdominal contents is set up, varies much; moreover, some individuals succumb, where the indications of abdominal inflammation are not very marked, the long duration of the strangulation seeming to exhaust the constitution. Perhaps, in most of these cases, inflammation, mortification, and gangrene of the strangulated gut cause the death, without involving the peritoneum generally in the disease.

I was called to a female, the housekeeper in a gentleman's family, many miles from my residence, suffering from strangulated femoral hernia. She had been visited by her medical attendant for several days, and he had used every exertion to return the hernia, but had only succeeded in reducing its size. Still the constitutional symptoms of obstruction were not severe, and there was no marked abdominal tenderness. The patient could not believe that she needed an operation, as she suffered so little, and the persuasion of her ordinary medical attendant and myself was insufficient to impress her with its necessity.

This was the only case that I ever met with where a patient persisted in refusing to be operated on. It gave additional evidence of the necessity of never allowing the mildness of the symptoms to be sufficient excuse for deferring the operation; for she died without any great pain or symptoms of peritoneal inflammation.

Medical men will sometimes echo the language of their patients, and say that, till the symptoms are more urgent the operation is not justifiable; but such an expression rather indicates a want of resolution than a just view of surgical practice.

[To be continued.]

**A GOOD SPECIALITY.** A man may know how to make a nail, and not know how to make a lock; but would it be possible for a doctor to understand the eyes, and be totally ignorant of the ears? A speciality is good, provided always there is generality also.

## Transactions of Branches.

### SHROPSHIRE SCIENTIFIC BRANCH.

#### A CASE OF ECHINOCOCCUS-CYST IN THE ORBIT.

By T. WHARTON JONES, F.R.S., Professor of Ophthalmology in University College, London, etc.

[Read Oct. 19th, 1864.]

IN Dr. Mackenzie's *Practical Treatise on the Diseases of the Eye* (Fourth Edition, p. 104), it is observed: "It is remarkable that the disease described in this section" (Section 6, chap. ii, Encysted Tumour in the Lacrymal Gland) "has not been met with, as far as I know, by any practitioner in this country."

The following case, which lately occurred to me, appears to be identical with those quoted by Dr. Mackenzie from Schmidt (*Ueber die Krankheiten des Thränen-organs*, p. 73; Wien, 1803), who originally described the disease, and called it *Glandula lacrymalis hydatidea*.

A man, about 30 years of age, was brought from St. Pancras Workhouse to University College Eye Infirmary with the left eye in a state of exophthalmia. The disorganisation being great, I decided on first excising the protruding eyeball from the ocular capsule. This being effected, I proceeded to explore the orbit by the touch; and found that the cause of the protrusion of the eyeball was a fluctuating cyst adhering to the upper and outer wall of that cavity and extending back towards its bottom. The removal of the cyst was accordingly the next object to be accomplished. As the first step towards this, I slit up horizontally the external commissure of the eyelids, together with the adjacent part of the ocular conjunctiva, which had been dissected from the excised eyeball. The anterior part of the cyst was thus rendered quite accessible; and all that was now required to isolate it was, to divide the cellular tissue between it and the remaining contents of the orbit—viz., the ocular muscles, capsule, etc. In the course of this stage of the operation, it was found that the cyst extended back deep into the bottom of the orbit. Thinking it, therefore, not advisable to follow it with the knife so far, I contented myself with removing as much of it as appeared to be safely accessible. On first opening into the cyst, a large quantity of serous fluid escaped; and on laying it further open, there was discovered what appeared to be a smaller cyst lying free in its interior.

This smaller cyst being lifted out with a pair of forceps, was found to be about the size of an ordinary plum; and proved, on examination by my assistant Mr. Power, to be an echinococcus parent-sack, or vesicle, with its contained fluid and colony of echinococci.

The cellulo-fibrous external cyst was, lastly, dissected out to as great an extent as was considered safe.

Before applying the dressings, the wall of the orbit, where the cyst had been attached, was examined with the finger, and felt to be beset with exostotic spiculae.

The operation being completed, the external commissure was reunited by suture, and the space left by the removal of the cyst, between the upper and outer wall of the orbit on the one hand, and the ocular muscles, capsule, etc., on the other, was lightly filled with charpie.

Suppuration from the cavity was duly established, and the healing went on favourably. The condition

of the parts eventually was the same as when the eyeball is simply excised.

The patient appeared to be fatuous; and the attendant who brought him to the hospital informed us that it was sometimes necessary to confine him to the lunatic ward of the workhouse. During his residence in the hospital, the man was quiet enough. Sometime after the patient was dismissed from the hospital, we were informed, on sending to the workhouse to inquire how he was, that he had been transferred to the county lunatic asylum.

The case which I have thus briefly related appears, as I have observed, to be identical in nature with the two cases quoted from Schmidt in Mackenzie's *Practical Treatise*, pp. 101-2, under the name of encysted tumour of the lacrymal gland, or, as Schmidt himself called the disease, *Glandula lacrymalis hydatoides*.

In Schmidt's first case, the patient died without any operation having been attempted for his relief. On examination after death, the tumour was found lying in connexion with the lacrymal gland, which was smaller than usual. It was composed of an external and an internal membrane, between which there was interposed a quantity of fluid. The external membrane, or covering, consisted of condensed cellular tissue, and could not be easily separated from the scattered acini of the lacrymal gland. The internal membrane, which was very fine, semi-transparent, and filled with a limpid fluid, admitted of being freely extracted from the interior of the external covering. Schmidt, correctly enough, recognised this internal membrane as a hydatid; but darkened the subject by his hypothetical speculations concerning the origin of the tumour in the lacrymal gland. In my case, although the external cyst encroached on the lacrymal gland anteriorly, it extended to the bottom of the orbit posteriorly, and there was no indication that it was originally developed in the lacrymal gland, rather than in the cellular tissue of the orbit.

In Schmidt's second case, the tumour was punctured with a trocar passed under the upper eyelid. A quantity of clear fluid was thereby evacuated at the time, and some continued to issue from the wound for several days after. At last, on the fourteenth day, a whitish substance presented at the wound, which, being seized with a forceps and drawn out, was found to be what Schmidt recognised as an hydatid more than an inch in diameter.

This was, no doubt, an echinococcus parent-sack, or vesicle, with its contained fluid and colony of echinococci, like that extracted in my case. The size was the same.

The walls of the echinococcus-cyst were composed of an external coat, laminated, extremely tough, and of a yellowish colour, and an internal coat, rough and easily lacerated. In the clear fluid filling the cyst, Mr. Power found suspended an immense number of echinococci, round cells, and detached hooklets. The echinococci, which are just visible to the naked eye, varied a good deal in length and outline; some from having the head retracted, some from having it protruded, some from being in different stages of development.

Siebold has shown that echinococci are capable of becoming developed into a species of tania, and that, therefore, they may be viewed as larvæ, just as *cysticerci telæ cellulosa* have been found to be a species of tania in an undeveloped state.

Siebold's experiments consisted in mingling lukewarm milk with echinococci *veterinorum* and giving it to dogs. On examining the animals thus fed, after an interval of three or four weeks, Siebold found in their intestines a species of three-jointed tania, into which the echinococci had become developed.

## BENGAL BRANCH.

### CASES OF TYPHUS FEVER IN CALCUTTA.

By S. GOODEVE CHUCKERBUTTY, M.D.

[Continued from page 634.]

CASE VIII. Castello, aged 30, an unemployed East Indian clerk, living at Chandrey-Choke, was admitted into my European male ward on August 20th, 1864, with a fever of four days' standing. No previous history was obtainable, as he could not speak rationally for any time. He got for that day the liquor ammonia acetatis mixture every three hours, and low diet.

August 21st. During the night, he was very restless, raving, and walking up and down the ward, with only occasional glimpses of intelligence; had had no sleep whatever; was now in a state of delirium; eyes ferrety; head hot; skin hot, harsh, and dry; abdomen tumid; distinct borborygmi and gurgling; liver projecting about an inch beyond the margins of the false ribs; pain on pressure over the right hypochondrium; mouth dry; teeth covered with sordes; tongue dull red at tip, clean and moist at the edges, covered with a granular uniform fur on the surface, tremulous and jerking; pulse 120, small, soft, and regular; respiration 40; percussion-note anteriorly duller than usual; respiratory sounds feeble. The head to be shaved, and a blister applied to it. Calomel, tartar emetic, and quinine, to be taken every four hours. Diet: milk and sago.

On August 22nd and 23rd, the delirium continued, with subsultus tendinum and picking of bed-clothes; pulse 108-120, and excessively feeble. On the latter day, there was congestion of the skin of the trunk, with a tendency to patches, disappearing on pressure and returning on its removal. Eyes congested; pupils contracted. The former medicines to be omitted; a mixture of quinine and dilute sulphuric and nitro-muriatic acids to be taken every four hours; ice to the head. Diet: milk and sago, beef-tea, and port wine.

The delirium and other unfavourable symptoms increased; and he died at half-past 2 P.M. on Aug. 25. There was no remission nor intermission of the fever from his admission.

POST MORTEM EXAMINATION, seventeen hours after death. Weather sultry. Cadaveric rigidity still in the legs, none in the arms; skin of the body generally covered with mulberry patches. Lungs both deeply congested, more so posteriorly; on section, their parenchyma appeared dark, and a good deal of non-spumous dark blood flowed out; section of the posterior surface looked like that of the liver, and a portion of it from the right lung thrown into water readily sank to the bottom; the congestion in the posterior part of the left lung was a little less; its section gave issue to a large quantity of serous fluid; a portion thrown into water did not sink; much congestion of the anterior mediastinum; pericardium contained a little serous fluid; heart fatty. On opening the skull, a good deal of fluid gushed out; the meninges were vascular; substance of the brain flabby, deeper coloured on the surface than usual; white matter and choroid plexuses congested; optic thalami and corpora striata natural. Kidneys larger than usual, and easily stripped of their capsules; both deeply congested, right more than the left; on section, the right kidney presented an extraordinary patchy appearance, the cones and the cortical portion being deep purple, the interpyramidal part and the part around the pelvis, as well as the line of junction between the pyramids and the cortex, being inky; left kidney also flabby, but lighter coloured on the surface; section of it presented the same appearances



as the right, except that the latter was more red and the former more purple. Stomach and intestines distended with flatus, the latter also of a greenish colour; liver flabby, but of an uniform reddish yellow colour throughout, somewhat larger in size; section let out a frothy grumous-looking fluid; spleen larger than natural, softer, and digitate on its inner surface; on section, a fluid came out. The mucous membrane of the stomach was almost blackened near its cardiac end; mucous membrane of the small intestine for several feet from the pylorus pale, afterwards uniformly congested for about three feet, then half a foot or so with intervening patches of paleness, the injection being arborescent; no prominence of the Peyer's patches; ileum generally pale, some arborescent congestion about the middle; below this again, pale down to the cæcum. The large intestine was healthy and pale, except in the transverse and descending colon, where it was somewhat congested. Walls of the heart rather thin; cavities contained a little thin blood; valves healthy; substance congested; a portion of it under the microscope presented oil-globules within the sarcolemma in the place of the sarcolemmal elements, and so did also a piece of the kidneys.

CASE IX. Olaf Nelson, aged 21, a Swedish seaman, living in China Bazaar, was admitted into my European male ward, on August 21st, 1864, with a fever of three days' standing, which had come on with a great pain in his head, and which had not undergone any remission or intermission since the commencement.

I saw him immediately on his admission. He was sitting on his bed; countenance flushed; eyes bloodshot; skin of the face covered with patches of redness; similar patches, but of a lighter colour, on the trunk; a great number of boils of different sizes on the legs and arms; the patches noticed above disappeared under pressure and returned on its removal; countenance heavy; irides iron grey; pupils of moderate size and sluggish; headache; lips dry; teeth covered with sordes; tongue covered on the surface with a grey granular fur, patchy anteriorly, tip and edges dull red and clean; bowels open; urine free; pulse barely perceptible at the wrist; respiration 32; no cough; a slight tremor in the arms when held up; abdomen full; epigastrium dull, tense, and painful. Ordered, a mustard plaster to the epigastric region; quinine, James's powder, and calomel, every four hours; head to be shaved, and cold lotion applied to it. Diet: milk, sago, and port wine.

Aug. 23rd. Slept last night; skin hot; headache; eyes congested; face flushed; countenance heavy; skin of the trunk congested, with a tendency to form into patches; abdomen tumid, dull and painful at the epigastrium. The former medicines to be omitted; and a mixture of quinine, dilute sulphuric and nitromuriatic acids, and tincture of opium, to be taken instead. Diet and wine to be continued.

August 24th. Some distinct reddish patches had appeared on the hands; pulse very feeble, 120.

August 25th. Pulse 120, very small; asleep, or rather in a deep stupor; mouth half open; lips and teeth covered with dark sordes; tongue parched, the fur on it brownish. The tincture of opium was omitted; the other treatment continued.

August 26th. Subtultus tendinum and muscular tremors increased; stupor as before; liver projecting, and very painful; skin congested; respiratory murmur harsh, with a sonorous rhonchus; no delirium. The former medicines were omitted. Ammonia mixture every hour; mustard plaster to the chest; turpentine fomentation to the abdomen. Port wine in increased quantity; beef-tea and milk. He died at 11.30 A.M.

POST MORTEM EXAMINATION, twenty-two hours after death. Legs still rigid; arm lax; body covered with some scattered purplish patches; decomposition advanced a good deal. On opening the skull, a good deal of dark fluid blood was poured out; the meninges appeared congested; no adhesion between them near the longitudinal fissure; the pia mater was of a deeper red than usual; surface of the convolutions of a deeper colour; no effusion of lymph; on section, both the white and the grey matters were found firm; cerebellum congested. Liver, kidneys, spleen, etc., all enlarged, softened, and somewhat congested. Intestines healthy throughout, except that a foot of the large intestine below the cæcum, and a foot and a half of the small intestine commencing a foot above the cæcum, were congested.

CASE X. Thomas Fleming, aged 24, a country-born European writer, living at the Almshouse, was admitted into my European male ward on August 21st, 1864, with a fever of four days' standing, which had never left him since the outset, nor remitted, nor exacerbated. He ascribed it to getting wet, and remaining in his wet clothes for six or seven hours. His bowels had been confined from the first; and his body was covered with well marked patches of a mulberry eruption from the third day.

At 7 A.M., on August 22nd, he presented the following symptoms. Mind quite rational; skin warmer than natural; tongue moist, clean, and scarlet at tip and edges, covered with a light yellow fur in the centre; pulse 120, small and weak; some cough and expectoration; nausea, and great abdominal uneasiness; numerous well defined small patches of a red eruption on the whole surface of the body, but more densely on the trunk than the extremities, disappearing under pressure and returning on its removal; face red; eyes slightly bloodshot; thirst considerable; pain in the right hypochondrium; only one stool since admission. A blister to the hepatic region. An ounce of castor-oil at once; quinine, James's powder, and calomel, every four hours. Diet: milk and sago.

August 23rd. Fourteen copious greenish-yellow stools from the castor-oil; vomited three or four times; the eruptive patches on the skin seemed to be fading; body perspiring and of ordinary temperature; tongue moist, less red at tip and edges; soft fur on the surface; pulse 108, of moderate size, but weak; respiration 26. Opium (gr. ss) to be added to each powder. Diet: milk, sago, beef-tea, and port wine.

August 24th. Tongue dry and rough, with a brownish fur in the centre, tip very dry and dull red, edges clammy; eruption on the skin much the same; body warm, but moist; two or three brown liquid stools; vomited five or six times a brownish fluid; pulse 104, small, feeble; respiration about 20; spleen projecting. Former medicines omitted. Acidulated quinine mixture every four hours; port wine increased.

August 26th. Mulberry patches of eruption, disappearing under pressure and returning on its removal, and more confluent than before. Medicines omitted. Ten minims of oil of turpentine in mucilage every six hours. Tartar emetic and tincture of opium in camphor mixture every four hours. Diet and wine as before.

August 28th. Quinine (gr. x) three times a day. Diet as before, with chicken-broth.

August 29th. Lips and teeth covered with sordes; no subtultus tendinum; skin a little above the ordinary temperature; pulse 100, moderately full, weak; slight headache; mind intelligent; general redness of the skin, but no mulberry eruption. Turpentine omitted; port wine increased; soda-water. Diet as before.

August 30th. Improving; no trace of eruption anywhere; redness of the skin less.

Sept. 2nd. Complexion dusky; pulse 80, soft; respiration 20; eyes almost clear; lips very slightly covered with sordes; tongue quite dry, glazed, of the colour of raw flesh, and leathery on the surface, glazed and adhesive at the edges; sudamina on the skin of the abdomen; lower edge of the spleen still about an inch beyond the ribs; skin warm, but moistish; very slight pain on pressure above the umbilicus; efflorescence less; several soft faecal stools. Tartar emetic mixture omitted. Fowl cutlets added to diet.

Sept. 4th. Skin of the forehead covered with erythematic patches, over the sacrum, and hip-joints abraded and surrounded by erythematous inflammation. Citrate of quinine and iron, with infusion of quassia, thrice a day. Soap-plasters to the sores. Port wine to be increased.

After this, his diet being increased, he gradually but very slowly improved. On Sept. 30th, his bed-sores were nearly healed; and he could stand upon his legs, though still too weak to walk.

Oct. 11th. He was now quite well; and, on the 13th, was discharged.

CASE XI. Ellen Freeman, aged 36, a married Irish woman, mother of several children, living near Tretta Bazaar, was admitted into my European female ward, on Sept. 17th, 1864, with a fever of nine days' standing, which was said to have abated a little on the two preceding mornings, when she took some quinine, besides jalap and salts as purgatives. The last purgative operated freely; but the fever continued.

When seen by me, soon after admission, she was lying on her left side, moaning a little; face, neck, and upper part of the chest, hot and red—the redness on the forehead, cheeks, and skin of the chest particularly, seeming to be in patches not disappearing so completely under pressure as in the preceding cases; pulse 120, slightly thrilling, small, weak, and regular; respiration 32; body hot but moist; no cough; nausea and a great thirst; pain in the epigastrium; tongue moist, covered with a transparent, granular, greyish fur on the surface; clean at tip and edges; no headache; slight muscular tremor; no subcutis tendinum; mind perfectly rational. Tartar emetic and laudanum in camphor mixture every four hours. Mustard plaster to the epigastrium; linseed-tea *ad libitum*. Diet: milk and sago.

Sept. 18th. No remission or intermission of the fever; redness of and pellicular deposit on the mucous membrane of the throat. Nitrate of silver lotion to the throat; quinine (gr. x) thrice a day; beef-tea and ice added to the diet; and port wine.

Sept. 19th. Vomited several times yesterday and last night; delirious, and slept very little; skin hot; pulse 96, small, weak; redness of the skin now completely disappeared under pressure and returned on its removal; tongue moist; countenance staring; pupils semi-contracted; throat all right. Former medicines omitted. Quinine, nitro-muriatic acid, and infusion of calumba, every four hours; a castor-oil and turpentine enema; a blister to the epigastrium, and cold lotion to the head. Diet as before.

Sept. 21. Back and thighs covered with numerous petechial spots, each of the size of a pea, disappearing under pressure and returning on its removal; pulse 136 (♀), small, weak; respiration 48; stupor; pupils of moderate size, contracting readily on exposure to light; hearing dull; tongue moist, clean at tip and edges.

Sept. 27th. Muscular tremors increased; bowels open; lay with the eyes shut, puffing at the mouth, froth escaping between the lips; respiration noisy,

not stertorous; skin damp with perspiration, in the armpit 107° Fahr., on the cheeks 100 Fahr.; intolerance of light on opening the eyelids; pupils of moderate size, though rather sluggish; on being roused was conscious, though stupor was unceasingly deep; pulse 92, moderately full, weak; respiration 40; abdomen full, soft; teeth covered with sordes; heart-sounds feeble, but without murmur. Medicines omitted; blisters to the chest and head; hydrargyrum cum creta and carbonate of soda every three hours; ammonia mixture every hour. Diet as before.

Sept. 28th. Comatose since yesterday. Stimulant mixture every half hour. She died at 10 P.M.

POST MORTEM EXAMINATION, ten hours after death. Weather hot and sultry. Body cold, legs rigid, arms relaxing. The transverse colon was enormously distended with gas; omentum loaded with fat; small intestines very slightly distended; mucous membrane of the duodenum slightly congested, and the Brunner's glands more prominent than usual; that of the jejunum pale and healthy, of the ileum marked by raniform injection in patches of varying size; caecal part of the large intestine was only a little congested; three or four round worms in its cavity. Lungs much congested; divided surfaces patchy, chiefly red, partly black; a portion of the upper part of the left lung thrown into water partially sank; a similar portion of the right, little, if at all. Heart flabby; very fatty looking on the surface; walls of the right ventricle almost entirely made up of fat; pulmonary artery beyond the valves contained some black fluid blood; surface of the left ventricle fatty; section of the walls fleshy, though flabby, and lighter coloured than usual; left ventricle contained some dark fluid blood. Valves generally healthy, but blood-stained. Liver not particularly large, of yellowish-white colour in part, and in part pinkish; substance very pale, and the lobules well defined, with their circumference formed by a pale ring, and the centre by a pinkish patch; little or no blood escaped from the cuts. Gall-bladder small, almost empty; spleen flat, about five inches in length, scarcely half an inch thick at the border, three inches broad at the widest part; surface marked by short reticular white lines; pulp appeared quite fluid, and the trabeculae numerous. Kidneys both of natural size, but very pale; the left much more congested than the right, and a few drops of blood flowed from the divided surfaces; large openings in pyramidal portion leading into blood-vessels; interpyramidal spaces occupied by thick columns of a granular material; pelvis of a redder colour, and the cellular tissue around it congested; on pressure, a little milky fluid flowed from some of the papillae. Membranes of the brain congested, and adherent to the margins of the longitudinal fissure; surface of the cerebral hemispheres, as seen through the arachnoid and pia mater of a light yellow or fawn colour; the white substance presented a good deal of punctiform injection, the grey a slight pinkish hue; the lateral ventricles contained little fluid; the corpora striata, thalami optici, corpus callosum, fornix, etc., were all pale, but of usual firmness; choroid plexuses and septum interpositum pale and empty; cerebellum and base quite healthy.

CASE XII. John Sullivan, aged 23, an Irish seaman, living at Mariners' Hotel, Loll Bazaar, was admitted into my European male ward, with a fever of five days' standing, on October 8th, 1864. He stated that he had been, previously to that, drinking very hard for some days; that on Monday he was drunk, and had the horrors in the night; that on Tuesday again he went out, got drunk, and had the horrors; and on Wednesday he again went out, and came home drunk, and had a shivering fit in the night, fol-



lowed by fever, which fever has never abated nor intermitted since the outset.

October 9th. He was lying on his back, but, on perceiving our approach, sat up in his bed. Had not slept since the commencement of the fever, which he ascribed to his having drunk freely of spirits on a stretch for three days previously. There was no one else ill with fever at the time in the boarding-house. Skin of the body now generally turgid; trunk covered with distinct maculae pretty densely, apparently raised, disappearing on pressure, and returning on its removal; similar eruption also on the arms and legs; skin rough; cuticle desquamating; upper part of the sternum and the whole of the neck and face suffused and dusky red, the colour disappearing on pressure, and returning on its removal; during the temporary disappearance of the redness, the surface looked yellow; eyes slightly blood-shot; eyelids, lips, and the tip and edges of the tongue, were of a vivid red; surface of the tongue covered with a granular light yellow fur; aching of the head, and a pain across the loins, and a tightness of the chest; body hot; pulse 112, full, tolerably firm; respiration 44, very weak; very slight tremor of the body; could not swallow, owing to a soreness of the throat; percussion-note of the chest anteriorly clear, posteriorly rather dull; anteriorly, vesicular murmurs rather weak, posteriorly weaker still; no rhonchus; pupils of natural size, and contracting readily on exposure to light.

October 10th. Delirious in the night; but slept, he said. The fever, eruption, and state of the tongue, as before.

October 11th. Delirium and fever increased; eruption as before.

[To be continued.]

## Reviews and Notices.

A MANUAL OF PRACTICAL HYGIENE, prepared especially for use in the Medical Service of the Army. By EDMUND A. PARKES, M.D., F.R.S., Professor of Military Hygiene in the Army Medical School, etc. Pp. 612. London: 1864.

[Concluded from page 605.]

THE subject of the fifth chapter is Food. Dr. Parkes thinks that the principles of diet ought not to form part of a work on hygiene; that it is the application of these principles which is to be considered. But, as many of the works on principles are not accessible to army medical officers, he enters into the subject more fully than he otherwise would. He divides aliments into four great classes—nitrogenous substances or albuminates; fatty substances; carbohydrates; and salts. The albuminates (albumen, fibrin, casein, etc.—all containing sulphur and phosphorus) nourish the tissues which give rise to mechanical force; and probably also these are connected with mental action. They also contribute to animal heat by oxidation, but not to a great extent. Fatty aliments are both plastic and heat-giving. They are essential to the production of mechanical force. Carbo-hydrates (starch, sugar, and their allies) are supposed to be entirely heat-giving; but on this point there is still room for inquiry.

In regard to food, as to other matters, much responsibility has been thrown on the army surgeon. He is required to ascertain that the food of the men is good and properly cooked; and also to give advice,

on taking the field, on the subject of rations. This implies that the army medical officer "will be called on to give opinions on the quantity of all kinds of food supplied to soldiers; on the composition of diet; on the quality and adulteration of the different articles, and on their cooking and preparation." In speaking of quantity, Dr. Parkes takes into consideration the amount of food required by a man, the required quantity of nitrogen, carbon, and salts, and of the fundamental dietetic principles, and gives tables showing the proportions in which these enter into the soldier's diet. He then expresses the following opinion.

"The ration of the English soldier at home appears to be deficient, to a certain extent, in albuminates; to be very poor in fat, and to be in excess in starches. The fresh vegetables are sufficient. It would be improved by the addition of more meat, or, what would perhaps be better, two ounces of good cheese—by some fatty food, such as bacon, butter—or by a greater use of oil in cooking (an excellent way of getting fat into the system)—and by a larger employment of beans and peas. The accessory foods are rather deficient, and vinegar especially should be used." (P. 145.)

The next sections are on the amount and kind of food in sickness; the digestibility of food; variety of food; and diseases connected with food.

In the sixth chapter, the subjects are, the Quality, Choice, and Cooking of Food, and Diseases attributable to Improper Quality. In speaking first of meat, Dr. Parkes gives direction for inspecting live animals and estimating their weight, age, condition, and health; briefly mentioning the diseases to which cattle, sheep, and pigs are liable, and their diagnostic symptoms. He then goes on to describe how dead meat is to be inspected, both fresh and salt; and speaks of diseases arising from altered quality of meat.

In speaking *seriatim* of the effect of various cattle-diseases on meat, Dr. Parkes finds that there is a good deal of doubt as to the effect of eating the flesh of cattle which have suffered from pleuropneumonia or malignant pustule. He brings forward (as he always does in regard to debatable points) the facts adduced on both sides of the question; and says, "that much more careful study than has yet been given to the subject is necessary to clear up the great variations of statement."

The section is concluded with sections on the cooking and preservation of meat.

The next sections contain instructions as to the examination of wheat and flour; the detection of adulterations by the microscope; the making and the use of biscuits and bread; the examination and adulterations of bread. Then come sections on barley, oats, maize and rye, rice, millet and other cerealia; on the leguminosae, succulent vegetables, milk, butter, cheese, eggs, sugar, starches, etc.

In the seventh chapter, on Beverages and Condiments, the author speaks first of alcoholic liquors—beer, wines, and spirits. Among the various matters in this section, we find an excellent epitome of what is at present known of the physiological action of alcohol on the various organs and tissues. On the use of beverages containing alcohol, Dr. Parkes expresses opinions which the teetotallers will not fail to adduce in support of their doctrines.

"Beer and the weaker wines contain other ingre-

dients which are useful; and when used in moderation, the quantity of alcohol is small. Experience does not show at present any increase of sickness, proneness to special diseases, or lessening of duration of life, in those who take moderately of beer or the weaker wines. In some cases, indeed, the moderate use seems to increase appetite and improve nutrition. But, on the other hand, experience most decidedly shows that the highest health, the greatest vigour, and long life, are quite compatible with entire abstinence from these liquids. In the case of spirits, the result of experience is very different, and I believe it may be asserted that experience does not sanction the use of spirits; or, if in health their employment is useful, it can only be, I believe, in quite exceptional circumstances; viz., where either a sudden stimulant is necessary for a failing heart, or when, in cases of deficient food, it is desired to lessen as far as possible the waste of the body, or to diminish mental power." (P. 232.)

In a subsequent page, he speaks still more strongly against the use of spirits.

"If spirits neither give strength to the body nor sustain it against disease—are not protective against cold and wet, and aggravate rather than mitigate the effects of heat—if their use even in moderation increases crime, injures discipline, and impairs hope and cheerfulness—if the severest trials of war have been not merely borne, but most easily borne, without them—if there is no evidence that they are protective against malaria or other diseases—then, I conceive, the medical officer will not be justified in sanctioning their issue under any circumstances. The terrible system which in the East and West Indies made men drunkards in spite of themselves, and which by the issue of the morning dram did more than anything else to shatter the constitutions of the young soldiers, is now becoming a thing of the past. But the soldier is still permitted to get spirits too easily, and is too ignorant of their fatal influence on his health. Still the British army bears the unhappy character of the most intemperate army in Europe; and it is certain that its moments of misconduct and misfortune have been too frequently caused by the unrestrainable passion for drink. Remembering all these things, and how certainly it has been proved that drunkenness increases the spread of syphilis, it is not too much to say that the repression of this vice, both by example and precept, must be considered to be the duty of every officer in the army. Moderation should be encouraged by precept and example; wholesome beer and light wine should be invariably substituted for spirits; and if these cannot be procured, then it may safely be said that the use of tea, coffee, or simple water is infinitely preferable to spirits under all circumstances of the soldier's life." (Pp. 236-7.)

After this condemnation of alcohol, in which there is certainly a good deal of reason, comes a section on non-alcoholic beverages—coffee, tea, cocoa—with drawings by which their structure and that of the substances with which they are adulterated may be recognised; and the chapter ends with remarks on condiments and on lemon-juice.

In the eighth chapter, on Soils, Dr. Parkes speaks first of conditions of soils affecting health; viz., conformation and elevation, vegetation, mechanical structure, chemical composition; he then makes some observations on the healthiness of the different kinds of soils, and gives directions for their examination, and for the choice and preparation of sites for stations.

The succeeding chapters, from the ninth to the sixteenth inclusive, have the following titles: Habitations (viz., Barracks, Wooden Huts, Tents and Camps, Hospitals); Sewerage; Warming of Barracks and Hospitals; Exercise and Physical Training; Clothing; Weight of Dress and Accoutrements; Description of the Meteorological Instruments used in the Army, and a few Remarks on Meteorology; and Climate. From all these we could gather instructive extracts; but must be content with commending them as containing as able and at the same time concise expositions of the various subjects as any one can desire to see. One point, however, although comparatively trivial, is worthy of notice as demonstrating the impartiality and candour of the author. In speaking of soldiers' packs and kits, he describes various kinds of pack that have been invented; and describes one which he has himself designed. Having done this, he points out some objections to it, arising from its mode of support; and says that, "although the plan is easy, the objections are, I believe, fatal to its adoption; and even in point of ease, I do not think it equal to Sir Thomas Troubridge's valise."

In the seventeenth chapter, a practical application is made of much of the matter contained in the preceding parts of the book, to the Prevention of some of the Important and Common Diseases in the Army. This may be attempted, the author says, in two modes:

- "1. By conforming with the several rules of hygiene, by which the body and mind are brought into a state of more vigorous health.
- "2. By investigating and removing the causes of the diseases which we find actually in operation."

In carrying out the latter mode, Dr. Parkes points out that the true foundation of etiology is correct diagnosis; and that all inquiry into causes is fruitless, unless diseases are properly identified. He recognises classification of diseases as convenient and useful; but if such terms as miasmatic, zymotic, etc., "make us overlook the absolutely different and uninterchangeable characters of the causes of the several diseases thus classed together for convenience, they can only be productive of harm." In very many cases, our knowledge of causes is but imperfect, and therefore our means of prevention are not yet obvious and precise. But we must not wait for perfect knowledge until anything is attempted in the way of prevention.

"We must act, as in many other affairs, on probability; and endeavour to remove those conditions which, in the present state of our knowledge, seem to be the most likely causes of the disease. It may be that, in some cases, we may be attacking only subsidiary causes, and may overlook others equally or more important. In some cases, indeed, we may overlook entirely the effective causes, and may be fighting with shadows. Still, even from mistakes, progress often arises; if, indeed, the difficult path of human knowledge is not always through error." (P. 427.)

The author first takes into consideration the Specific Diseases; viz., paroxysmal fevers; yellow fever; cholera; spotted typhus; bubo, or oriental plague (Pali plague in India); typhoid fever; relapsing fever; bilious remittent fever; eruptive fevers; erysipelas; and hospital gangrene. He then notices various Non-Specific Diseases—dysentery and



diarrhoea; liver-diseases: insolation; phthisis pulmonalis; scurvy; military ophthalmia; and venereal diseases.

In speaking of the latter subject, after noticing the great loss to the public service from diseases arising from sexual intercourse, Dr. Parkes notices, as preventive means, continence, marriage, precautions against the disease, and also the cure of the disease in those affected. He considers, very rightly, that the cultivation of a more high moral tone than at present prevails among youth, especially of the working classes, is of the highest importance. Indeed, he believes the morality of the barrack to be at least not worse, in many instances, than that of home life.

"While, in spite of the exciting literature of the day, and of the looseness of some of the older boys at the public schools or at the universities, the moral tone of the young gentlemen of our day is perhaps better than it was some half-century ago, the conversation of the classes from which the soldier is drawn is still coarse and lewd as in the middle ages. There is too close a mixture of the sexes in the English cottages for much decency, and the young recruit does not often require the tone of the barrack to destroy his modesty. In fact, it is possible that, in good regiments, he will find a higher moral tone than in the factory or the harvest-field. We must trust to a higher cultivation, and especially to religious influences, to introduce among the male youth of the nation, in all its grades, a purer moral tone, so that the safeguard of modesty and religious scruples may be cultivated and not destroyed. In the army, the example of the officers, and their exertions in this way, would do great things, if we could hope that the high moral tone which happily exists in some cases could inspire all." (P. 451.)

Besides this, Dr. Parkes would have restrictions put on temptation; that is to say, he would have prostitutes prevented, as far as possible, from openly exercising their calling in the streets, or from assembling in public places near barracks. As to the allegation of "interference with the liberty of the subject," Dr. Parkes observes that "it is quite true that men should see that, in the case of venereal diseases, the state must as much protect its citizens, as from the danger of foul water or the chances of gunpowder explosions, or the risks of any other perilous and unhealthy trade."

Besides moral training and the removal of temptation, Dr. Parkes recommends regular physical and mental employment of an agreeable kind; and especially temperance. As to marriage, he does not appear to think that much can be done towards making it a preventive of venereal disease, beyond "allowing as many men to marry as possible" (six per cent. is the present number), "and making marriage a reward, by providing good quarters, and by allowances to married men when *en route*."

We have already, on several occasions, expressed our opinion on the Contagious Diseases Prevention Act, that it is a step towards the continental system of registering, and therefore recognising, prostitutes. Dr. Parkes does not take the same view of it; nor does he think that by the Act any undue interference with liberty is committed. A woman, he argues, ought to be as much prevented from propagating syphilis, as from propagating small-pox; and, as we cannot set aside prostitution entirely, "let us obviate its effects, as we best may, while, at the same time,

by higher culture and better religious teaching, we endeavour gradually to remove the custom." The provisions of the Act relative to the apprehension of diseased prostitutes, Dr. Parkes believes likely to work well; at all events, he hopes that a fair trial will be given to the measure.

The eighteenth and nineteenth chapters are on Disposal of the Dead, and Individual Hygienic Management.

In the twentieth chapter, Dr. Parkes gives some very useful instructions regarding Statistics; and points out the fallacies by which they are often rendered useless; such as ambiguity or want of uniformity in the dividing character of the units examined. This is a chapter which will repay study by those who are in the habit of collecting medical statistics.

This chapter ends the first book, in which the general principles of hygiene are illustrated, as far as possible, by examples from the life of the soldier. In the second book, Dr. Parkes considers more closely the nature of the soldier's service, and its influence. This he does in five chapters, entitled respectively, the Recruit, Home Service, Foreign Service, Service on Board Ship, and War. In the third of these chapters, the meteorological, sanitary, and statistical conditions of each of the foreign stations are given very fully—the chapter, in fact, occupying nearly seventy pages of the book.

We must close this review, although in doing so many points must be overlooked on which there would be room for comment or analysis. The mere titles of the chapters, however, and the sketches which we have given of different parts, will enable some idea to be formed of the high merits of the work. It contains, expressed in instructive language, everything that the army medical officer should know—as far as present knowledge will permit him—as to the means of preserving the health of the soldier or protecting him from disease. More than this, the material contained in the greater part of the book, being of general application as well as special, would form an excellent basis for a complete treatise on hygiene for civil use. We should like to see the applicable portions of the book, unmilitarised, and supplemented by necessary matters, formed, if not by Dr. Parkes himself, at least with his cooperation, into a Manual of Practical Hygiene for ordinary use.

Another thought remains to be expressed before we conclude. This book is written for the use of the army-surgeon. This officer is now not merely casually consulted on hygienic matters; but he is, by the Army Regulations, positively required to "advise commanding officers on all matters affecting the health of the troops, etc." What he ought to know in order to do this, Dr. Parkes has enabled us to see far more clearly than we saw before. The army-surgeon, to be able to do his duty properly, must not only be a well qualified medicine-man, but must have, always in order for use when required, a considerable amount of chemical, mathematical, and other scientific knowledge. The army medical officer, in fact, is now more than ever required to be the representative of science, in its most extended meaning, in the army; and he is there for the express purpose of applying that science to its highest purposes. The perusal of Dr. Parkes's book has impressed on us more forcibly than ever the conviction

that the position of the army medical officer ought to be one of the highest honour consistent with the absolute necessities of discipline. In the present stage of the question of the treatment of army medical officers, the appearance of this book is most opportune. We heartily trust that his Royal Highness the Commander-in-Chief, and the Director-General, and all authorities of the War Office and Horse Guards, will look into it carefully: for we are sure that—unless obtuse beyond other mortals—when they see how great an amount and variety of knowledge an army surgeon ought to possess, in one department alone of his duty, they will wonder how they could ever imagine or assert, that “third-class men were good enough for the medical service of the army.”

## British Medical Journal.

SATURDAY, DECEMBER 17TH, 1864.

### THE TREATMENT OF A PARTURIENT FEMALE TWO HUNDRED YEARS AGO.

OUR readers may be interested at the present moment with the details of how a parturient woman was treated nearly two hundred years ago. M. Le Roi, Conservator of the Library at Versailles, has just published some original and authentic “*curiosités historiques*” of the times of Louis XIII, Louis XIV, and Louis XV. Therein we find detailed an account of the birth of the Duke of Burgundy, grandson of Louis XIV.

Anne Marie Victoire of Bavaria, wife of the Dauphin, was of very delicate constitution. When, therefore, she became pregnant, and was about to give an heir to the throne of France, great anxiety was felt as to the event. Up to that time, it had been the practice with royalty to employ female midwives. Marie de Medicis, Anne of Austria, and Marie Thérèse, wife of Louis XIV, were all delivered by *sages-femmes*. But, on this occasion, Louis XIV determined that the Dauphiness should be confided to the hands of Julien Clément, who was then the most renowned accoucheur in Paris. Clément was born at Arles, in 1638; came at an early age to Paris, and there studied midwifery under Lefebvre. He soon obtained renown, and by his skill greatly contributed to the revolution in practice—the employment of man-midwives—which was now finally accomplished by the decision of Louis XIV.

This point being settled, the next was to choose a nurse for the Dauphiness. The practice was to select a woman in the seventh month of pregnancy. The following were the qualities then demanded of a nurse fit to suckle a prince. She must be between twenty-two and thirty years of age; have had her milk three months; be of a sanguine temperament; hair

black or brown-chestnut; a robust constitution; good appetite; be delicate neither in eating nor drinking; gay and good-humoured; always cheerful; subject to no unpleasant affection; have no bad odour of the breath, axilla, or feet. The skin must be white and smooth. She must also be tolerably good-looking, of good address, and well made. But, above all, her breasts must be well formed, and give a good supply of milk. She must also be of good reputation. M. Le Roi, on this score, relates an instance in which it was only discovered by pure accident that the husband of the nurse who had been chosen to suckle one of the children of Marie de Medicis was afflicted with syphilis.

In the case of the Dauphiness, four nurses answering the above description were selected, and were then visited by an agent of the physician-in-chief of the court at their own dwellings. This agent first learnt from the *cure* that they were good Catholics; then obtained from their medical men certificates that there was neither epilepsy, scrofula, etc., in any member of their families. Next, he inquired of their neighbours that they were of good repute. The inquiry being satisfactory, they were at once placed under the *gouvernante* of the nurses—a sort of *duenna*; and each in her own apartment fed her child, awaiting the accouchement of the Dauphiness. When this event occurred, the physicians selected one of the four to suckle the royal child; and the other three were kept in reserve. The selected one was then put under the constant observation of a woman, to prevent her husband from approaching her. Dionis, the surgeon, relates an anecdote on this point, showing how a nurse was instantly dismissed for having spoken to her husband.

On the evening of the 4th of August, 1682, the Dauphiness felt her first labour-pains. Clément had been already living a month at Versailles, awaiting the event; and from this moment up to the 6th, when the child was born, he never quitted his patient. The news of the approaching event spread through the Palace, and soon the whole Court was in motion. The court-yards, the squares, and the road from Paris to Versailles, were lit up with the torches of visitors, as if it had been day. The antechambers of the Dauphiness's room, and the gallery leading to it, were crowded. The King, however, was not informed of the state of things until five o'clock on the following morning. He rose at once, ordered prayers to be offered up, and himself immediately attended mass; and at six was with the Dauphiness. At this time, the labour-pains had diminished. In the afternoon of the 5th, the pains again returned with force. By this time all the ambassadors, etc., were assembled, ready to despatch news of the birth to their different courts. The Queen remained constantly with the Dauphiness. As the pains continued, and the child was not produced, she ordered the relics of



St. Marguérite (which were usually exposed in the Queen's room during confinement) to be brought; and next the lying-in bed—*lit de travail*—was prepared. This bed had already been used by Anne of Austria and Marie Thérèse in their confinements. The Dauphiness's women then arranged her hair, and put a larger nightcap on her head, to preserve her from cold. During the night of the 5th, the pains were strong and prolonged. The prayers of the Queen were incessant. The King himself was present, constantly encouraging the Dauphiness; and on several occasions, assisted by her husband, supported her whilst walking about in the room.

The duration of the labour at length caused serious alarm. "Clément alone remained unmoved. He had satisfied himself that there was no important obstacle to delivery; and had already assured the King that, though the labour would be tedious, it would terminate well." The pains still increasing, it was decided that the Dauphiness should be bled. Dionis performed the operation, by the aid of candles, the windows being shut, as was then the custom, in order better to see the vein. The first physician held the candle, and the head apothecary the bleeding-cup. Thereupon, the labour-pains increased; and Clément informed the King that the delivery was near at hand. The Dauphiness was, in fact, delivered of a son at ten o'clock on the morning of the 6th. The practice at the time was not to cut the cord until the placenta had passed; but Clément objected, and divided it. He argued, that the child should be at once removed into the hands of the nurse; that, the longer the placental circulation continued, the greater the difficulty of separating the placenta. The child was then cleansed with a sponge dipped in warm water and wine, in which butter had been dissolved. The placenta, when it was passed, was placed upon a silver plate, and examined by the physicians, to prove its integrity.

The labour had lasted two days and nights, and the Dauphiness required repose. She was placed in her bed; and, as the parts had been much bruised, etc., Clément applied to them a poultice of eggs and almonds. To the stomach, in order to prevent inflammation, he applied the warm skin of a black sheep, which was skinned in a neighbouring room.\* A potion of oil of sweet almonds, etc., was then administered. Clément, moreover, in conformity with a custom which he afterwards abandoned, left Dionis to converse with the Dauphiness, in order to prevent her sleeping for three hours after delivery. The window-shutters were then closed; and, night and day, for the next nine days, the light of one candle

only was allowed in the room. The first three days the patient's food was broths, fresh eggs, and jelly, and her drink barley-water, etc. When the fever was over, soup and fowl were given, and a little diluted wine. At the door of the room was posted, for six weeks, a servant, whose duty was to prevent any one having a perfume about them to enter. This precaution was held to be of the highest importance in those days.

Louis XIV gave Clément 10,000 *livres*, and thanked him warmly for his services. He ever afterwards behaved most generously to Clément, who was afterwards the *accoucheur* of the Duchess of Burgundy; and went three times to Madrid to deliver the Queen of Spain. In 1711, the King gave him letters of nobility, "containing a clause which honoured alike the King and the subject of his generosity." This clause was to the effect that he was not to abandon the practice of his art. He never forgot the "prudence and the calm and steady conduct of Clément, which were the principal causes of the successful issue of this important event."

#### THE MORTALITY IN LONDON.

No one can have read the weekly returns of the Registrar of Births and Deaths in London without being struck by the now almost habitual recurrence of the statement, that the number of deaths has exceeded the calculated average, and this in no trifling degree. During four recent weeks, the deaths were respectively 1409, 1454, 1586, and 1742. At this season, we look for an increasing rate of mortality; but these numbers are 210, 215, 307, and 331, in excess of what they ought to have been, allowance having been made both for the season of the year and for the increase of population. The quarterly returns tell the same story. In the quarter ending Sept. 30th, there were 18,008 deaths; nearly 1000 more than in 1863, and nearly 3000 more than in 1862. In the second quarter of this year, the deaths were 17,346, against an average of 15,000 to 16,000; and in the first, when the general mortality was swelled by unusually severe cold, 22,733 persons died—the calculated average being about 19,000. In these three quarters, then, we may say, that there have been, at least, from 6000 to 7000 more deaths than if there had been only the average mortality.

Going no further back than this, we might say, with confidence, that this high death-rate could not be regarded as a mere fluctuation—a swing of the pendulum in the direction of death, speedily to be compensated by a return to the opposite extreme. It is obvious that it is not merely a case of old people whose term of existence has been anticipated by a spell of cold weather, or of children prematurely carried off by summer diarrhoea. Some general cause unfavourable to health must be in operation to

\* The chronicle states that the butcher himself who skinned the sheep carried on his apron the piece of hot skin to the bed of the Dauphiness, and that, to the horror of all the ladies, etc., the bloody sheep itself followed the butcher up to the very side of the royal bed! "De sorte que le monton courut et tout sanglant le survint et entra presqu'en la lit, ce qui fit un peur effroyable à toutes les dames presentes à ce spectacle."

account for an effect so continuous; and this cause, as might be expected, is to be found in the prevalence of the so-called zymotic diseases. Whenever there is an important and sustained rise in the rate of mortality, it may almost certainly be referred to one or other of these diseases. We watch them, therefore, on this account, and also for other reasons. These are the diseases often called preventable; preventable, that is, by public measure. All diseases may, of course, be said to be, to some extent, preventable by individual precautions. Bronchitis and pneumonia, and other consequences of exposure to cold, may be prevented by appropriate clothing; phthisis, gout, and diathetic affections, by individual attention to the laws of hygiene—ventilation, diet, exercise; but no regulation of a Board of Health can compel a man to wear warm clothing, or to eat and drink moderately, or to seek the vital stimuli of sun, air, and exercise, or to let out injurious gases and exhalations from his dwelling. Society is, therefore, not responsible for these matters; but by the organisations representing it, Boards and Officers of Health, it may frame regulations which shall operate efficiently in preventing overcrowding, in ensuring the removal of refuse, in providing that none but pure water and food shall be supplied: measures which prevent or resist the rise and spread of these zymotic diseases.

This high rate of mortality—the increased prevalence of zymotic diseases—is not limited to the present year; but extends back to 1863 and 1862. Up to the end of the year 1860, the average mortality was diminishing. From 1840-1849, it was 25.1 per thousand; 1850-59, 23.6; in 1860, 22.6. We were beginning to plume ourselves on the good results of our sanitary measures; and to think we were making steady progress in the reduction of town mortality, from 23 or 24 per thousand, at which it now stands, to the 17 per thousand of country districts. But our boasting was premature. In 1861, the death-rate had risen to 23.2; in 1862, to 23.56; and in 1863, to 24.52. Towards the end of 1861, typhus suddenly made its appearance, unexpectedly, and almost unaccountably. The reports of the Registrar-General do not distinguish between typhus, typhoid, or enteric fever and relapsing fever, which are all included under the term typhus; and we gather from them simply the fact that, in the last quarter of 1861, fevers were greatly on the increase. The records of the Fever Hospital, and the able researches of Dr. Murchison, show that this increase was due entirely to true typhus. In the first instance, it seemed as if it had been imported; but we cannot enter into this question; and we incline to believe that the fever found its source, as it has since found abundant aliment, in London. An epidemic of typhus is always significant; and the present one acquires increased significance from its asso-

ciation with epidemics of all the important zymotic diseases which have successively swept through London; and, in spite of many favourable circumstances, the death-rate, as seen above, has become higher and higher. Showing itself in the winter quarter of 1861, when 624 deaths from fever were registered, typhus prevailed through 1862; the deaths in the successive quarters being 991, 1015, 833, 796. In the summer months of 1863, it subsided, increasing again towards the close of the year. As winter approaches this year, it is again on the increase, and to a degree hitherto unprecedented.

Scarlatina, which constantly yields a large mortality, gave, in 1861, 2338 deaths. It increased gradually through 1862, and gave a total of 3457; and again, in 1863, the startling number of 5075. Fortunately, its ravages have abated during the present year; but the numbers have risen considerably during the past quarter.

The remarkable invasion of small-pox will not soon be forgotten. In 1861, there were only 215 deaths from this disease; in 1862, 345; in 1863, it may be said to have raged, there having been no fewer than 2012 deaths from it. It was checked, we may suppose, by vaccination; and, in the last quarter, gave only 140 deaths. This sudden and fierce epidemic cannot have been due simply to the number of unprotected individuals. The spread of small-pox was, no doubt, greatly favoured by the conditions which rendered the other zymotic diseases epidemic.

Finally, measles contributed its share to the general result. The mortality from this disease remained low till the third quarter of 1862. In the winter of 1862-63, it was exceedingly high; falling again during 1863; but giving formidable returns for the last two quarters of the present year, 844 and 855—double the average.

These diseases, the cause of the increased mortality—21,005 dying from them in 1863, as compared with 13,001 in 1861—are, no doubt, themselves due to some cause or causes. We have not left ourselves space to discuss this question. We may just allude to the cotton-famine, driving hither half-starved operatives; the displacement of population by the railways, and consequent overcrowding at other points; and the evidence of destitution, not very apparent in other ways, which is furnished by the unusually frequent instances of death from this cause.

PROFESSOR DR. MOSLER of Giessen, well known by his helminthological researches, and other inquiries on sundry subjects of clinical medicine, has been called to Greifswald in Prussia as Professor of Clinical Medicine, and has already assumed the duties of his new office. His predecessor was Professor Rühle, now Clinical Professor at Bonn.



# Extracts from Lectures CLINICAL AND SYSTEMATIC.

BY  
T. SPENCER WELLS, F.R.C.S.,

SURGEON TO HER MAJESTY'S HOUSEHOLD, &c.

## I.—ON INNOCENT AND MALIGNANT TUMOURS.

I now propose to make a few observations upon the distinctions between innocent and malignant growths.

Sufficient evidence has been adduced to prove that, in some of the cases where cancer has been said to have been cured, the disease was not a cancerous, but an innocent growth; one which might have been safely left alone, or treated in a much milder mode than the curer adopted, and with greater success.

It is undoubtedly true that, in some few cases of alleged cancer, medical men have expressed an opinion that a tumour was cancerous, yet it has been removed, and has not returned. But, in all probability, such cases should be explained by an error of diagnosis. Some assistance towards lessening the number of such cases may be obtained by bearing in mind certain leading distinctions between cancerous and other tumours. These distinctions may be shortly summed up in the following tables. I have arranged them in two series. The first are the signs which may be observed before the removal of the tumour, or without any puncture or other interference with it; the second are those which can only be known after anatomical examination of the structure of the growth.

Table I.—Before Operation.

| MALIGNANT OR CANCEROUS TUMOURS.  | INNOCENT TUMOURS.  |
|--|--|
| 1. Are often multiple, occurring simultaneously in different tissues or organs.                  | 1. Are usually single, or found in one tissue or organ only. |
| 2. Are generally very painful.   | 2. Seldom very painful.                                      |
| 3. Usually grow fast.  | 3. Usually of slow growth.                                   |
| 4. When near skin or mucous membrane, usually implicate them, and interfere with their movement. | 4. Skin and mucous membrane usually move freely over them.   |
| 5. Undergo spontaneous change or decay.  | 5. Rarely degenerate.  |
| 6. Cause hard swelling of neighbouring glands.   | 6. Glands rarely affected; any swelling is not hard.         |
| 7. When bare, there is rapid formation of morbid vegetations, and fetid corroding discharge.     | 7. No such vegetations, nor discharge.                       |
| 8. Are often surrounded by smaller growths of the same nature.                                   | 8. No such smaller growths.                                  |
| 9. Are preceded or accompanied by a peculiar hecixia.  | 9. General health may be perfect.                            |

Table II.—After Operation.

MALIGNANT OR CANCEROUS TUMOURS.

INNOCENT TUMOURS.

1. The cellular elements often differ both in form and arrangements from those which constitute normal structures. (Heterologous.)

2. The elements are combined in great variety.

3. Adjoining tissues are infiltrated or destroyed by the diffusion of the new structure.

4. Usually return after extirpation, in the same or in some other part.

1. The cellular elements always resemble normal structures either in their embryonic or perfect form. (Homologous.)

2. The elements are as uniform as those of normal structures.

3. Neighbouring parts are compressed or displaced; not otherwise altered.

4. Do not return in the same or in any other part, if completely removed.

The following remarks upon each of the above characters of the two classes of tumours should be borne in mind.

1. Several innocent growths may be multiple; for example, warts, encysted tumours, enchondroma, fatty tumours and fibroids. Hence this character is only distinctive of malignancy when other characters of innocent growths are wanting, or when several different tissues or organs are simultaneously affected; for instance, breast and uterus, breast and lung, testicle and liver, are very seldom simultaneously attacked by innocent growths.

2. Malignant tumours are usually painful at some stage of their growth. The pain is often almost unbearable, especially at night. It arises spontaneously, or is excited by motion or pressure. There are but few exceptions to this rule, although encephaloid, melanosis, and colloid, sometimes attain a large size before there is much pain. The character and degree of pain vary—(a) with the tissue or part affected, (b) the nervous supply, and (c) the tension of surrounding fasciæ. Innocent tumours are seldom painful; and if pain be induced in them by pressure, it is seldom durable, unless the tumour is a neuroma, or is in close connection with a nerve.

3. Although malignant tumours, as a rule, grow faster than others, yet there are many exceptions to this rule. For instance, epithelioma may go on for ten or twenty years before any extensive destruction of tissue is effected; while innocent cystic or cystosarcomatous tumour of the ovary may attain a very large size in one or two years.

4. The rule that malignant growths adhere to the skin or mucous membrane which covers them, while innocent growths (even of large size) admit of the skin or mucous membrane being freely moved or folded on them, is only open to exception when a strong fasciæ or a serous membrane intervenes between the tumour and the skin. For instance, soft cancer of the testicle may attain a large size while the skin of the scrotum remains freely moveable.

5. At some stage of their growth or development, malignant tumours soften and break up. This occurs without any injury or inflammation, as a simple process of decay which takes place early in some textures, late in others. This is a totally different change from the decay of an innocent polypus when its pedicle is compressed or twisted, and from the superficial ulceration of a fatty tumour when rubbed by clothing or otherwise irritated.

6. The swelling of the glands to which lymphatics pass from a malignant tumour may be sympathetic only, or is the hardness of infiltration. In the latter case there is pain, more or less persistent, and increased on pressure, while the swollen gland is very

hard. It has become the seat of malignant deposit, and after the removal of the original tumour, the same disease will progress in the gland if not removed. The softer the malignant tumour, the sooner are neighbouring glands hardened. Hard cancer may exist for a long time without any affection of lymphatics or glands; but as soon as softening commences, the fluid passes along the lymphatics and the glands suffer. The merely sympathetic enlargement of glands in the neighbourhood of a malignant tumour—an enlargement which may disappear after the removal of the tumour—occurs without hardness or much sensibility; while the glandular swellings which accompany suppuration or the inflammation of innocent growths are more acute, are not hard, and yield readily to treatment, or cease with the inflammation which was the exciting cause.

7. When a malignant growth is exposed to the air by the removal or giving way of its coverings, the surface becomes covered with morbid vegetations, which either die nearly as soon as they spring up, or form protruding masses. In either case a very irritating sanious fetid pus is formed in abundance, which corrodes any unprotected part upon which it is allowed to remain or flow over. Nothing like such vegetations are seen in any innocent tumour, with the exception of some in the mouth, which are kept in a state of irritation by the warmth and moisture, the constant passage of food and air, the perpetual motion of the tongue, or the irritation of a rough tooth.

8. The formation of several smaller tumours around a large one of the same character is often quite characteristic, and is sometimes the first or only undeniable proof of malignancy.

9. The cachexia which accompanies malignant growths may be primary or secondary. In some cases the tumour is only the outward and visible sign of a constitutional disease, or of an altered state of the blood, either inherited or acquired. In such cases the physiognomy is altered before the tumour appears, or the change takes place simultaneously with the appearance of the tumour. In other cases the constitutional contamination is secondary—the blood is altered by the absorption or entrance into the blood-vessels of the fluid portions or products of the tumour. Here the local disease—epithelioma, for example—may exist for several years before the general health is sufficiently affected for disease to become apparent in the physiognomy.

Passing now to the distinctions enumerated in the second table, it must be observed, that as these structural characteristics can only be discovered by anatomical, microscopical, and chemical examination after the tumour has been removed—or by watching the results of removal—they are of comparatively little practical importance. They are useful in proving the accuracy or error of diagnosis, and in prognosis; but the surgeon has to determine the question of removal on other grounds, many of which have been already stated. I shall, therefore, refer you to standard works for an account of the anatomical, microscopical, and chemical characters of the different varieties of cancer, only remarking with regard to these characters, that the form, arrangement and combination of the cellular elements (as stated in the first and second propositions of the second table), are so different in the two classes of tumours, that there is seldom much difficulty in distinguishing those of an innocent from those of a malignant nature by the structure alone.

With regard to the value of infiltration of healthy structure as a sign of malignancy, it must be remembered that, while no innocent tumour commences as a morbid infiltration amongst natural structures, yet

the converse does not hold, for we cannot say that a tumour is innocent because it is distinctly circumscribed.

Lastly, with respect to the return of tumours after extirpation, either at the same spot or at a distance, it should be remarked, that some innocent tumours of the cellular tissue increase very rapidly after removal, if only a small piece be left behind; but that innocent tumours very seldom return, if completely removed. If a swelled gland in the neighbourhood of a tumour of doubtful character has been removed, and the swelling has been only sympathetic or inflammatory, the gland is found to be merely infiltrated with fluid blastema not arrived at a stage of new organisation. The microscope detects none of the structural elements of new growths. But when the swollen gland is hardened by cancerous infiltration, and is removed with the tumour—or when the process goes on in neighbouring glands after the removal of the tumour—then the gland on examination is found to resemble in structure, and to have the same malignant tendencies, as the original tumour.

These remarks upon innocent and malignant tumours, should be accompanied by some suggestion that in the present state of science the practical surgeon requires a more exact classification of tumours than is afforded by this simple division into two classes. While preparing some such classification for the pupils at the Grosvenor Place School, I met with Dr. Billroth's paper on tumours (*Deutsche Klinik*, 1859), and I give it here as the best I have seen. It has the great advantage of being prepared principally with a view to prognosis—or to the different degrees or modes in which different tumours are apt to spread or return—while those names are retained which are most useful to the surgeon, and those are eliminated which are chiefly interesting to the histologist.

I. INNOCENT TUMOURS. Those which very seldom return after extirpation, but sometimes extend in great numbers over the whole surface of the body.

1. *Simple Cysts*, *a*, with serous fluid; *b*, with mucous contents; *c*, with soft, fatty contents; *d*, with blood.
2. *Fatty Tumours*.
3. *Fibrous Tumours*. *a*, Soft fibrous tumours; *b*, Hard fibrous tumours.
4. *Simple Cartilaginous Tumours*.
5. *Exostoses*. *a*, Spongy exostoses; *b*, Ivory exostoses.
6. *Vascular Tumours*. *a*, Erectile Tumours; *b*, Cavernous vascular tumours.
7. *Horny Ecrecences*.

II. SARCOMAS. Tumours which often return locally, but seldom extend to internal organs.

1. *Glandular (adenoid) Tumours*.
2. *Colloid Tumours*. *a*, Homogeneous colloid sarcoma; *b*, Areolar colloid tumours.
3. *Cystoid and Cysto-sarcomas*.
4. *Hard Sarcomas*.
5. *Soft Sarcomas*.
6. *Soft Papillary Tumours*.

III. CARCINOMATOUS TUMOURS. Tumours which always return locally, then in the nearest lymphatic glands, and lastly extend to internal organs.

1. *Carcinoma*.
2. *Canceroid*, or *Epithelioma*.
3. *Scirrhus*.

IV. MEDULLARY AND MELANOTIC TUMOURS. Tumours which generally rapidly return locally, and soon extend to internal organs.

1. *Encephaloid*.
2. *Melanotic Tumours*.

AN ARTIFICIAL LEECH. M. Damoiseau has recently called attention to a monstrous (artificial) leech—*T'rabdelle*—which he has invented. It seems to have many advantages over the old-fashioned pneumatic cupping apparatus. The author is able to draw, with one glass, fifteen drachms of blood in a minute, and the blood does not immediately form a clot which plugs the vessels, as with the cupping-glass. Blood-letting is so much out of fashion in England that probably no one will take any notice of this invention, and yet it seems to offer advantages which are deserving of attention.



## Association Intelligence.

### WEST SOMERSET BRANCH.

A QUARTERLY meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Wednesday, January 11th, 1865, at 7 P.M.

Notice of papers or cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D.,  
Honorary Secretary.

Taunton, December 10th, 1864.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH: MONTHLY MEETING.

A MONTHLY meeting of the Birmingham and Midland Counties Branch was held at the Birmingham Library, on December 8th; JAMES RUSSELL, M.D., President-elect, in the Chair. Thirteen members were present.

*Member of Council.* Mr. Oliver Pemberton was elected member of Council, *vice* Dr. Wade elected Honorary Secretary.

*New Member.* Mr. Thomas Thompson, Queen's Hospital, was elected a member of the Branch, having been previously elected by the Council a member of the Association.

Dr. Russell having vacated the Chair, it was taken by Mr. T. Watkin Williams (Honorary Treasurer).

*Paper.* The following paper was then read.

Notes on Epilepsy. By J. Russell, M.D.

## Reports of Societies.

### LIVERPOOL MEDICAL INSTITUTION.

NOVEMBER 17TH, 1864.

HENRY LOWNDES, Esq., Vice-President, in the Chair.

*Cirrhosis of the Liver.* Mr. RAWDON showed a specimen of cirrhosis of the liver weighing 2½ lbs., the spleen weighing 1½ lb.; and gave a brief outline of the case.

Mr. STEELE remarked, that this was an instance of the disease occurring in a person of temperate habits. He had met with several similar instances in his practice; and the conclusion which he drew was, that we must not regard alcohol as the only cause of the disease. He mentioned this in the belief that we are too apt to regard alcohol as the cause, and not a cause, of this altered condition.

Dr. SHEAREE, Dr. GEE, and Dr. BURROWS took part in the discussion.

*Intestinal Disease.* Mr. RAWDON showed a specimen of perforation of the transverse colon, with malignant disease of the rectum.

*Remarks on some Points in the Surgical Writings of Celsus.* By H. LOWNDES, Esq. After some prefatory remarks on the period of time that had elapsed since the days of Celsus, Mr. Lowndes commenced with the subject of fractures. Celsus points out the necessity of early reduction by extension; but, if some time has elapsed, it must be postponed till the swelling has subsided. At the setting, the limb is to be wrapped in linen cloths soaked in wine and oil. On the seventh or ninth day, splints are to be applied; and the broadest splint should be placed on the side to which the fracture inclines. In compound fractures, the bones are not to be put in apposition till

the healing process has commenced. The limb is to be placed in the most comfortable position, and the wound dressed with oil and wine. Compound fractures of the thigh generally require amputating; those of the humerus less frequently. There is always shortening after fractures of the thigh. In cases of ununited fracture, the limb is to be extended to excite fresh injury. In the present day, we are not obliged to regard shortening as inevitable in cases of fractured thigh. With reference to the treatment of ununited fracture, we are indebted to a member of the Liverpool Medical Institution for a new method, which promises to be successful in the treatment of these cases. With regard to injuries of the head, Celsus describes an instrument very similar to the modern trephine; but he used it rather for disease of bones than for injury. Celsus insists on the careful probing of wounds of the head, to detect fracture and its direction. For these cases he recommends simple treatment, and, on the subsidence of febrile symptoms, healing ointments. But, if untoward symptoms supervene, he recommends excision of the fractured portion, in order to give vent to fluid beneath. Celsus recommends the use, during the operation for excision of bone, of a copper plate, to prevent injury to the membranes of the brain; but he does not describe anything like our modern elevator. Mr. Abernethy was one of the first English surgeons to point out the necessity of discrimination between those fractures requiring active treatment and those that did not; he says that the wound made by a trephine is far more serious than many fractures themselves. Sir Astley Cooper coincided in the view. For the treatment of varicose veins, Celsus recommends either cautery or excision. The cautery is applied by first exposing the vein with a knife. In excision, he appears to have removed portions of the vein, and then covered the wound with an agglutinating plaister. Till lately, palliative measures have generally been resorted to; but now several modes of radical cure are getting into common use. Mr. Lee recommends pressure, by pins introduced under the veins, combined with subcutaneous division of them. The simple subcutaneous division practised by Sir Benjamin Brodie was found dangerous; but Mr. Lee's plan of sealing the veins above and below the wound renders the operation safe and effectual. Celsus treats diseases of the anus in less than two pages, and yet leaves very little else to be said. Fissures and external piles are to be excised. Internal piles are to be ligatured; if they are very numerous, they are not all to be operated on at the same time. Regarding wounds of the intestines, Celsus considers those of the small intestine as incurable, while those of the large intestine are to be stitched up and returned in their proper order. Alluding to wounds of the abdominal parietes, Celsus says that they are to be sewn up, but that sutures of the skin or of the "interior membrane" alone are insufficient. We have here carefully described a mode of bringing together abdominal wounds that has been revived of late years by those who have brought the operation of ovariectomy to so great perfection. That surgeons in the time of Celsus were very successful in treating abdominal wounds, we may infer from the fact that they operated for ventral hernia by removing elliptical portions of integument and peritoneum, and uniting the wound by the method just described. Rhinoplastic operations do not appear to have been practised on a large scale in the time of Celsus; but he gives some directions for removing deformities about the nose, mouth, and ears, arising from ulceration. He gives directions for making a prepuce in cases where the glans penis has been left bare. Fistulæ that do not get

well by injection are to be excised; if depending on caries, the bone is to be cut away and removed. *Fistula in ano* he treats by the introduction of twisted threads, which are to be moved about twice a day, and changed every third day. When the knife is used, he recommends the introduction of a pledget, that the edges may not immediately close. In the treatment of excessive traumatic hæmorrhage, Celsus would first fill the wound with dry lint, and make pressure with a cold sponge; he would then try styptics; and, in case of these failing, he recommends ligature of the vessel above and below its wounded part, dividing it in the interspace. This proceeding is the one so strongly insisted upon by Guthrie; and it is curious that it did not suggest to the ancients the use of the ligature in amputations. Mr. Lowndes then drew attention to the great advance made in surgery, instancing herniotomy, lithotritry, lithotomy, ovariectomy, subcutaneous operations, and acupressure in amputations. Mr. Lowndes then briefly referred to the interval between the decay of medicine, that followed the Augustan era, and its revival with the general revival of learning. Passing to later days, he referred to the writings of medical men, including a work on surgery written in the year 1612 by Peter Lowe; also one by John Muys, from which particularly quaint quotations were given. These quotations showed very plainly the sad state into which our art had fallen towards the close of the middle and indeed dark ages.

Dr. DESMOND thanked Mr. Lowndes for his paper. He thought that some of the observations of Celsus would not disgrace surgeons of the present day.

Dr. SHEARER coincided in these remarks.

#### OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, NOVEMBER 2ND, 1864.

ROBERT GREENHALGH, M.D., Vice-President, in the Chair.

Six gentlemen were elected Fellows.

*Diseased Urinary Organs in an Infant.* Dr. GERVIS exhibited the Bladder, Kidneys, and Ureters, removed from a child who died at the age of five weeks. The bladder was thickened, the ureters dilated to the size of the finger, the pelvis of the left kidney greatly distended, and the structure of the kidney itself very thin. After birth there was no apparent difficulty in micturition.

*Monstrosity.* Mr. JAY, of Pulham-Mary, Norfolk, showed a specimen of Double Monstrosity. The children, both females, were joined together by the sides of the thorax and abdomen. They were in other respects perfectly formed. The labour was not attended with any great difficulty. They were born alive, but died in a few minutes. There was but one cord.

*Vaginal Douche.* Dr. ADOLPH RASCH exhibited a Vaginal Douche. It consisted of six feet of strong India-rubber tube, made heavy on one end by a hollow piece of lead, and having at the other an elastic bougie with several holes in the bulbous end, for introduction into the vagina. The instrument acted as a syphon; and the only but important point, for which Dr. Rasch claimed some credit, is the simple way of establishing the flow through the tube. This is done by immersing about two feet of the tube, along with the leaden end, in a vessel containing water, whereby this part of the tube becomes filled with water. It is then lifted over the brim, and the vessel being placed on some elevated article of furniture, the fluid at once escapes on the well-known syphon principle. Having no complicated structure,

it cannot get out of order. The force of the stream is, of course, regulated by the height from which the fluid is made to flow. The instrument was made by Mr. Evan Lewis, of the City Road. [The principle for which Dr. Rasch claims credit is the same as that described by Dr. Fleming, in the JOURNAL for October 1, 1864.]

*Monstrosity.* Dr. J. BRAXTON HICKS showed an Anencephalous Monstrosity. The monstrosity was one of twins. Its delivery could not be effected until the cord was divided, owing to the shortness of the latter. The cord was cut through above the brim of the pelvis.

*Ovariectomy.* Dr. GREENHALGH and Dr. BRAXTON HICKS presented a report on the specimen removed by Mr. Baker Brown by the operation of ovariectomy. After giving a complete account of the general and microscopical appearance of the tumour, they conclude by stating that it was a specimen of that form of disease recently designated adenoma of the ovary.

ON THE MANAGEMENT OF THE THIRD STAGE OF LABOUR.  
BY HENRY EASTLAKE, L.K.Q.C.P.

This paper consisted of an historical, analytical, and critical dissertation on the subject. Having briefly described the opinions which existed amongst the accoucheurs of times gone by, the author proceeded to give an account of the modern views and principles which govern the placental stage of labour. Dr. EASTLAKE laid great stress upon the hand being placed firmly on the fundus uteri at the moment the child is being expelled, the uterus being thus followed down, and the contraction maintained by gentle pressure. External manipulation, judiciously applied, was, in the majority of instances, quite sufficient *per se* to effect the expulsion of the after-birth, without any traction whatever on the funis. He believed that the great secret was to exert the pressure during a contraction; in short, to act in unison with nature as we did in the application of forceps, where we applied our chief force at the moment of a pain. Dr. Eastlake had no doubt that many would imagine that after all this was no modern idea; but he demonstrated that this teaching was not definitely described and insisted on in our manuals of obstetrics. Dr. Crédé, the professor of midwifery at Leipsic, appeared to be the only one who had advocated this doctrine and brought it prominently before the profession. The author next considered the subject of retained placenta, and alluded to the various causes which arrest nature's process of extruding the after-birth. The three steps in the natural expulsion—namely, (1) the detachment from the wall of the uterus, (2) its extrusion from the uterine cavity, and (3) its expulsion from the vagina—were recognised and dwelt upon. Regarding the subject of morbid adhesion of the placenta, Dr. Eastlake suggested the possibility of being able to diagnose this condition by means of auscultation. For a long time he had been fully persuaded that by means of auscultation we often possessed not only a negative but a positive sign of fetal death—a peculiar modification of the uterine *souffle*. The alteration in tone suggested the idea of a muffled sawing noise, very different to the gentle blowing murmur heard in normal cases, where a living child existed *in utero*. He considered that no ergot of rye should be given in cases of retained placenta, unless we were quite sure that no abnormal adhesion or irregular contractions existed. In cases of spasm of the os uteri, where the placenta became encysted, the administration of chloroform was recommended. Another point of interest alluded to was the occasional existence of a supplemental after-birth, which was spoken of by Dr. Barnes, Dr. McClinton, and other authors under the name of *placenta succenturiata* or



*placenta spuria*. He (Dr. Eastlake) had seen a specimen of such an after-birth in the museum of the Lying-in Hospital in Dublin, obtained from an ovum of five months. When such a mass remained in the uterus after the true placenta had been expelled, it often gave rise to secondary hæmorrhage, and an impression arose that due caution had not been exercised in the extraction of the after-birth. He agreed with Dr. McClinton that, remembering the possibility of such an occurrence, we should be slow to utter any opinion which would damage the character of a professional brother. In conclusion, the author alluded to the several conditions which generally authorise us to have recourse to a speedy removal of the placenta, such as *post partum* hæmorrhage, convulsions, rupture of the uterus, and possibly, under certain circumstances, where the uterus was inverted, with the after-birth still adherent.

Dr. PALFREY had understood the author to state in his paper that in his opinion the length of time that ought to be allowed to elapse before any active measures were adopted in cases of retained placenta was one hour. Dr. Palfrey distinctly differed from the author. It appeared to him that an hour was considerably too long a time to wait, for by so long delay the evil largely increased. Take, as an example, a case of adhesion of the placenta to the uterus, the result of previous inflammation. Is not the treatment in such a case attended with much greater risk and anxiety after waiting an hour than a delay of half that time? Again, Dr. Palfrey would inquire of the author, would he advise so long a time as an hour to elapse in a case of irregular contraction of the cervix uteri, where probably a portion of the placenta may be felt protruding through the os, and the remainder firmly detained in the cavity of the uterus? Dr. Palfrey's opinion was, that in all cases of retained placenta, from whatever cause such retention might arise, *thirty minutes* was the full extent to which, with safety to our patient, we dare wait.

Dr. GREENHALGH was of the author's opinion, that adherent placenta was of very rare occurrence; but that its retention from the so-called hour-glass, irregular, or spasmodic contraction happened every now and then. He (Dr. Greenhalgh) did not approve of letting blood out of the funis, on the ground that the uterus did not contract so efficiently upon a lax as on a firm substance, and that, in event of artificial detachment being required, the ill-defined boundaries of the placenta would greatly complicate the case. He had never experienced any material difficulty in removing a detached placenta from the cavity of the uterus or vagina where early had recourse to. He confirmed the experience of the author, that the same uterine contraction which caused the expulsion of the child frequently detached the placenta. As a rule, he should not feel inclined to delay the extraction of the placenta beyond the half hour, unless the labour had been very lingering, the uterus in a state of inertia, or the patient much prostrated, when he might be induced to wait an hour. In hæmorrhage, convulsions, inversion, etc., it might be necessary to proceed to the immediate removal of the placenta. Dr. Greenhalgh then drew attention to a case of placenta prævia, in which so great had been the loss of blood that the introduction of the hand in performing version, and subsequently for the extraction of the placenta, occasioned the most severe convulsions, in one of which the patient died. He strongly deprecated powerful traction on the funis, which might lead to irregular action or inversion of the uterus, laceration of the funis or placenta, etc. A considerable experience had convinced him that chloroform had not the slightest influence in delaying the expulsion of the placenta; on the contrary, its anæsthetic

effects greatly aided the practitioner in making firm pressure over the uterus, and thus facilitating its extraction. He had never met with a case of supplemental placenta. In conclusion, he thanked the author for directing his attention to the difference in the uterine souffle before and after the death of the fœtus *in utero*; of which, he stated, he had no experience.

Dr. EASTLAKE, in reply, said that he had listened with great interest to the remarks made by Dr. Greenhalgh. In answer to Dr. Palfrey, he said that gentleman had misunderstood that portion of the paper which referred to the time that should be allowed to elapse before extracting the after-birth. An hour was the maximum period that he (Dr. Eastlake) would wait in any case of retention, and then only where a doubt existed as to the cause; but in the majority of instances the placenta might be removed within a quarter of an hour. He had had the pleasure of meeting Dr. Graily Hewitt at a case two nights ago, and he felt sure that that gentleman could testify to the ease with which he (Dr. Eastlake) had pressed off the placenta on that occasion.

Dr. GRAILY HEWITT could corroborate Dr. Eastlake's statement as to the effect of the pressure over the fundus uteri, unaided by traction on the cord, in expelling the placenta, having very recently witnessed it in the case to which he was called by Dr. Eastlake. He had himself been in the habit of depending chiefly on pressure on the uterus for expulsion of the placenta, although he also held the cord just tightly enough to ascertain where the placenta was and how it was moving. He believed Dr. Eastlake's paper would have good effect in more widely inculcating a practice which he believed to be good. With reference to the effect of direct pressure on the uterus in procuring expulsion of the placenta, he had observed an interesting fact: in one case where pressure had been used for nearly an hour unavailingly, the uterus suddenly and forcibly expelled the placenta when the organ was grasped, one hand at each side, just at the junction of the Fallopian tubes with the body of the uterus. It appeared in this case, at all events, that this part of the uterus was more susceptible than others. Possibly this fact might have an application in other cases.

## WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, NOVEMBER 4TH, 1864.

GEORGE D. POLLOCK, Esq., President, in the Chair.

*Excision of the Hip-Joint in Children.* Mr. HOLMES exhibited to the Society two children, one, a boy, seven years of age, the other, a girl, aged ten, in whom he had excised the hip-joint in the course of the present year; and a dissection from another successful case, in which the child had died a few months after the operation, of inflammation of the lungs, accidentally contracted. The latter preparation had been exhibited at the Pathological Society, and will be found more fully described in the 14th volume of their *Transactions*. The notes of the cases were given in the *Lancet* for Nov. 5.

Mr. Holmes remarked that his object in this communication was rather to show what the results of successful excision of this joint are, than to discuss the general question of the propriety of the operation: he, therefore, merely dwelt so far on the latter subject as to insist that there are conditions for which excision holds out a prospect of cure where natural cure is hopeless; and in these cases the time required for recovery after operation is far less than that required for the natural cure, while the joint which is left by it is more useful.

In the case of the boy, there had been extensive abscess, reaching nearly to the knee, and the child was rapidly sinking under the profuse suppuration at the time of the operation, which was performed in February last. At the operation, the femur was divided through the trochanter, and the acetabulum, which was ulcerated, was scraped out. Recovery was comparatively speedy. The boy has been going about for some time, and has lately been walking on a high boot. All the wounds have long been soundly healed; there is motion in every direction, he can walk with a slight limp for a considerable distance; and his gait is daily improving, as he becomes more accustomed to his boot. The shortening is about one inch and a half.

In the other case, that of the girl, there was great distortion at the time of the operation, much shortening, and very loud crepitus on rotating the limb. The head of the femur was lying loose in the joint, and quite denuded of all soft parts; there was also a portion of the neck of the femur lying loose in the joint, and the surface of the remaining part of the femur was ulcerated; consequently a natural cure was impossible. The acetabulum was healthy. The recovery was rapid, the operation having been performed in June, and the child having been about now for some weeks. It is only very lately, however, that she has been fitted with a high boot, so that she walks awkwardly as yet. The shortening, also, is greater than in the former case—about two inches—but the range of motion is equally extensive.

Most probably, in both these cases, the same state of things existed as in the dissected preparation, where the end of the femur was drawn up into the joint by the common tendon, and united to the acetabulum by numerous bands of adhesion, allowing free motion in all directions. A perfect capsule of fibrous tissue surrounded this new articulation.

In reply to a question, Mr. Holmes said that he had never performed the operation, except there was abscess, and unless bony crepitus was heard on pressing the joint-surfaces together.

*Aneurism of the Arch of the Aorta.* Dr. WAX brought forward a case. The subject of this disease was an English merchant who, in the spring of 1861, and whilst residing in Buenos Ayres, sustained a severe concussion of the thorax. His horse falling, he was thrown from the saddle, and fell with violence on the chest. He was not aware of having sustained other injury than a severe shaking; but in the summer of the following year he began, whilst on a voyage to England, to suffer pains which were at times intense, and were referred to the chest, shoulders, and arms. In October of 1863, the existence of an intrathoracic aneurism was ascertained. In November, when he first came as a patient under Dr. Way's observation, a large pulsating swelling of the chest was apparent, its centre at the level of the third costal cartilage, and vertically in a line with the left sternoclavicular articulation; it presented all the characters of an aneurismal tumour. The patient was the subject of severe and paroxysmal pains; sleep was only procurable by the aid of opiates; there was loss of appetite, feeble voice, and great general prostration. At this point in the history of the case, the patient consented to the continuous application of ice, with a view to the solidification of the tumour; and, aided by the valuable counsel of Dr. Herbert Davies, this plan of treatment was carried out perseveringly during a period of upwards of six months. A recumbent posture on an Alderman's bed was adopted, and absolute rest maintained. From the commencement of this treatment to within a few weeks of the patient's death, there was an entire remission of the painful symptoms. The tumour became flattened, firm, and the

pulsations less apparent; the general health improved, and the voice regained its natural power. In June last, after an attack of cough with expectoration of a pneumonic character, he was seized with symptoms which indicated a spasmodic closure of the glottis. These recurred at intervals; the inhalation of chloroform (practised at the suggestion of Mr. Christopher Heath) afforded great relief to these symptoms; others, however, which seemed to proceed from a mechanical closure of the windpipe supervened, the dyspnoea became extreme, and the patient sank exhausted on the 10th of July last.

On *post mortem* examination, there was found on the left side of the thorax an aneurismal sac, reaching from the level of the third rib to the cricothyroid membrane, measuring six inches from base to apex, and thirteen inches in circumference; the wall of the sac was formed in front by the remains of the sternum and three upper ribs and their cartilages, these having become much eroded and absorbed. Posteriorly, pressure on the trachea had led to absorption of portions of its three upper rings, and a nipple-like projection of the mucous membrane narrowed the calibres of the tubes, and formed the only boundary at that point between the windpipe and the contents of the aneurismal sac. There was no erosion of the bodies of the vertebrae, or of the ribs at their vertebral extremities. The aneurism commenced at a point two inches above the origin of the aortic arch, with which it formed a slit-like communication, extending so far as the origin of the left subclavian artery. The sac was occupied by a mass of coagula, hard and decolourised in front, semifluid and dark in colour on the posterior aspect. The vagus and recurrent laryngeal nerves were involved on the left side in the wall of the aneurism, and the latter nerve was greatly stretched and flattened. There was much oedema of the whole of the soft parts about the rima glottidis. There was some hepatisation of the base of the right lung. The left (as well as the heart and other viscera) was healthy.

## Correspondence.

### CAUSTIC POTASH IN ECZEMA.

LETTER FROM ERASMUS WILSON, ESQ., F.R.S.

SIR.—Your correspondent "Enquirer" asks of me three questions in reference to my recommendation of caustic potash in eczema.

It must be premised, that the case under treatment is one of chronic eczema, attended with thickening and induration of the skin; the thickening and induration being occasioned by serous infiltration into the tissues of the corium; and the intention of the remedy to cause the exudation of the serous lymph from the infiltrated tissue. In such a case, I should pencil the surface with a solution of equal parts of potassa fusa and water. The pain is burning and severe, but ceases at the end of a quarter of an hour, and is followed by a sense of relief. The pain is by no means unbearable. In a few seconds after the application, a gelatinous-looking exudation appears upon the surface of the skin, sometimes in such abundance as to require to be absorbed by means of a piece of dry lint; after which, the part should be dressed with the oxide of zinc ointment. The repetition of the solution may be made at the end of a week, if the skin retain its hardened and thickened character; and again with a similar interval, until the eruption is cured.

I may observe, that the remedy is not suitable for



a large surface, nor for an acute stage of the affection; and that the blistered part should be dressed after the operation with the oxide of zinc or basilican ointment spread on lint.

I am, etc.,  
ERASMUS WILSON.

17, Henrietta Street, Cavendish Square, Dec. 6th, 1864.

## POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

SIR,—I shall feel obliged by your affording me space to lay before the Poor-law Medical Officers the following Bill, in order that they may give it their serious consideration prior to the meeting of Parliament. It will be seen that I have thrown upon the General Council of Medical Education, in conjunction with the Poor-law Board, the responsibility of fixing our salaries, which, I trust, will be the means of preventing the opposition of the Guardians to the Bill. I hope my medical friends will not object to the establishment of dispensaries in all densely populated places, as I feel sure it will not only be beneficial to the poor, but that it will tend to elevate the Poor-law medical officer in the opinion of the public, and save him a vast amount of time, which might be far better spent than in dispensing medicines.

I am not at present prepared with a member of Parliament to take charge of the Bill; if, therefore, any Poor-law medical officer can induce an honourable gentleman to do so, and will communicate with me on the subject, I will furnish all requisite information.

I am, etc.,  
RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, Dec. 5th, 1864.

A Bill on the subject of Poor-Law Medical Relief, with a view to secure to the Poorer Classes the most efficient Medicines, and to the Poor-Law Medical Officers an uniform and equitable rate of payment.

WHEREAS it is expedient to alter and amend the laws relating to the Medical Relief of Poor Persons in England and Wales: Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal and Commons in this present Parliament assembled, and by the authority of the same, as follows.

1. That within six months after the passing of this Act, it shall be the duty of the Poor-Law Board, under the advice of the General Council of Medical Education and Registration of the United Kingdom, to lay down an uniform system of medical relief for the poor.

2. That the Poor-Law Board shall order the establishment of dispensaries in all those parts of unions, incorporations, and parishes under Local Acts, where the population resident in an area, the diameter of which is less than four miles, exceeds ten thousand in number, and when they deem it expedient, may unite the medical departments of two or more unions, incorporations, or parishes, for the purposes of this Act.

3. That in unions, incorporations, and parishes under Local Acts, or parts of one or the other where the population is much scattered, the Poor-Law Board may allow the Poor-law medical officers to find medicines for the sick poor, and shall direct the Guardians to pay them, in addition to their salaries, such sum or sums of money as the Poor-Law Board, under the advice of the Medical Council of Education and Registration, shall advise.

4. That the Poor-Law Board, under the advice of the General Council of Medical Education and Registration of the United Kingdom, shall fix the salaries

of all the Poor-law medical officers, whether union, parochial, or under Local Acts in England and Wales, on an uniform and definite principle, especial regard being had to the number of sick poor attended by them, and the distance to be travelled.

5. That the Poor-Law Board, under the advice of the General Council of Medical Education and Registration of the United Kingdom, shall draw up a list of cases for which extra medical fees shall be paid, and also fix the amount of money which shall be allowed for each case on such list; but should the Guardians be desirous to commute the extra medical fees, they may be allowed to do so, on making a triennial calculation of the amount of fees which have been paid during the preceding three years, and adding them to the salary; but where the fees have already been commuted, that then a calculation of the cases where fees would have been payable, but for the commutation, shall be made, and the amount added to the salaries.

6. That all medicines found by Boards of Guardians or their medical officers, all salaries, and all extra medical fees, shall be paid for out of such moneys as shall be annually voted by Parliament for the purposes of medical relief and by the Boards of Guardians, in equal shares and proportions; or, in default of any parliamentary grant for the purpose, then the whole payment shall be an union charge.

7. That the Poor-Law Board shall annually lay before Parliament a classified report of the diseases treated by the Poor-law medical officers in each union, incorporation, or parish under a Local Act, in England and Wales, and also the number of deaths occurring in each class.

8. That the statutes now in force, or rules, orders, and regulations of the Poor-Law Commissioners or Poor-Law Board, or parts of either one or the other, which are contrary to the true intent and meaning of this Act, shall be and they are hereby repealed and rescinded, and from and after six months from the passing of this Act, shall have no force or effect; but nothing herein contained shall prevent the Poor-Law Board issuing any order or orders, or making any rule or rules, or regulations, for the better carrying out the true intent and meaning of this Act.

## THE NEW INDIAN MEDICAL WARRANT.

SIR,—Your correspondent, "A Retired Surgeon-Major," seems to have been guided by his feelings rather than his judgment.

The question of relative rank is not raised in Sir Charles Wood's dispatch to the Governor-General at all. It is obviously not a question which can be handled by the Secretary for India until it has been determined by the Horse Guards and War Office. When Sir Charles Wood withdraws from Indian medical officers any boon of this kind which has been conceded at home, he may cry out, but not before. Questions of rank can only be settled with the consent of the highest military authority in the kingdom; and the battle must be fought, not at the India Office, but at the Horse Guards.

Again: it is true that Indian officers always had Royal Commissions; but the "Retired Surgeon-Major" forgets to add that those commissions had effect "in India only"; whereas the new commissions hold good all over the world.

The Medical Funds of India were, no doubt, noble institutions, and it is to be regretted that Her Majesty's Government should have interfered with them; but the "Retired Surgeon-Major" does not tell you that military funds in India are abolished also, and that there is nothing to prevent a provident man

making a provision for his wife out of the liberal pay now allowed.

Your correspondent says: "There is not a word about furlough pay to Europe." Is it possible that this gentleman, who undertakes to advise his younger brethren on the choice of a career, can be ignorant that this has already been settled in an extremely liberal manner by a previous dispatch?

A little further on, he says that, "in the British service, sick or private leave counts for pension." If this gentleman knew anything of the British service, he would know, first, that very little "private leave" is to be had in the British service; secondly, that if an officer is sick for more than a month or two at a time, he is at once put on half-pay, when not an hour counts for service or pension.

Will you allow me to ask your correspondent where he will find any service in the world that will give a man £220 a year for seventeen years' service? In contrasting the old and the new scales of pension, your correspondent ignores the fact that, if a medical officer has served a tour as deputy inspector-general, he gets £250 a year *over and above* what his time entitles him to; if an inspector-general, he gets £300 extra. Thus an officer who has served twenty-seven years, including five as an inspector-general, can now retire on a pension of £806 a year.

Once more. Your correspondent entirely forgets to notice that, under the old rules, a medical officer, if absent for *one day* from his charge, was subject to heavy stoppages. Under the new, he enjoys a liberal scale of "unemployed pay".

I am, etc., D. F. G.

#### TREATMENT OF PARTURIENT WOMEN.

SIR,—In controversy, it is of the utmost importance to keep clearly in mind the subject to be discussed; to define closely the terms employed; and, above all, to exclude any matter irrelevant to the one point at issue.

In the recent discussion, as to what is the proper diet for a woman during child-bed, I hold the inquiry, as to whether parturition be a physiological process or a disease, to be an instance of such irrelevant matter; for not only does it open out to us new questions for settlement, such as, what is a natural process and what a disease? where does the one end and the other begin? etc.; but, what is of more importance, it leads us to connect our ideas of treatment, be it medicinal or dietetic, with such processes or diseases, rather than with the special indications presented by the patient under our care. What we have to do is, to treat our patients, not their diseases. Take an average case of a lying-in woman just delivered, average age, average strength, average pregnancy, average labour, and what do we see? and what do the principles of medicine teach? We find the entire economy to have undergone a change; depression has followed on action; rest succeeded labour; one set of organs, the uterine, is gradually subsiding into tranquillity; another, the mammary, as gradually arising into activity; the various bodily functions, digestion amongst them, are all, more or less, suspended; tired nature is, as it were, seeking her therapeutical restorer, physiological rest. During this stage, is not a light diet as most rationally indicated, as it is found by experience to be by patients most constantly desired? In the course of a few days, sometimes sooner sometimes later, reaction ensues, demanding a gradually increasing supply, both in quantity and quality of nourishment; so that, before the end of the first week, the usual diet of health may generally be resorted to.

On either side of such an average example as this, a wide range of cases is to be met with, characterised, on the one hand, by plethora and congestion, and, on the other, by anæmia and debility; and it would be as criminal to order strong food for the former, as it would be to insist on slop-diet for the latter. If the movement of Dr. Graily Hewitt be only negative in its aim—if it be instigated for the purpose of overthrowing the notion that woman during childbed always requires a low diet—all very well; but if it be intended to establish the opposite—viz., that, under such circumstances, she invariably requires a liberal diet—let us beware lest, while endeavouring to avoid Scylla, we run into Charybdis. Each dogma would be as unsupported by reason and experience; as, if acted upon, it would lead to baneful results. Of the two, I confess, I lean rather to under- than over-feeding. The symptoms indicative of want are generally, by those on the look out for them, readily understood, and their remedy easily administered. Let us do nothing by rule. Let us remember that, as meddling midwifery is bad, so a meddling interference with the dictates of nature as to the diet of the parturient woman is bad also.

I am, etc.,

J. W. W.

[Our correspondent seems to us to have hit the just—the physiological—*milieu*. We are surprised that this side of the question has been so little regarded. So long as the fetus is *in utero*, its organic processes are in active operation, and at the expense of the mother's blood. The mother, not only has to provide for the nutrition of her own body, but she has to supply materials for the vigorous development of another body. But the moment the child is separated from the mother, that large supply is no longer needed, and is in fact suddenly arrested. Between this moment and the moment when the mother yields a full supply of milk to the child, there is a complete revolution effected in her physiological state, what might naturally be called a moment of repose. EDITOR.]

#### LETTER FROM THOMAS POPE, ESQ.

SIR,—Mr. Legge will have it that pregnancy is not a disease; but what says Milton?

"On that forbidden tree, whose mortal taste  
Brought death into the world, and all our woe."

And he proposes what he thinks a puzzle—a definition of the words disease, disorder, and the French word *malady*; to all of which he assigns different meanings, whereas they are all synonymous, and nothing more easy of solution. Ease, order, and *bon-à-Dieu* are blessings; but their opposites are curses—diseases. This attempt to mystify leads him to ignore syllogism, which tells us that all maladies must be diseases. He then says: "If, then, parturition be a disease, so must micturition and defæcation be diseases also." Can this be logic? Healthy micturition and defæcation are pleasant; disease is painful; therefore healthy micturition and defæcation are not diseases. Strangury and tenesmus are painful; disease is painful; therefore strangury and tenesmus are diseases.

I do not coincide with Mr. Legge's concluding paragraph; and so far am I from anticipating that the justly celebrated trio with which he concludes will condemn my advocacy, I flatter myself they will even join the phalanx of veterans.

One word more, not only to Mr. Legge, but to all those who use the abdominal bandage immediately after delivery. With this custom I have never complied, from a conviction that it could not be beneficial, more particularly where the superincumbent parts above the pelvic, and in part hypogastric con-



tents, are more or less in excess. How can the uterus and its appendages, the bladder, and rectum, be advantaged by their being forced down thereon? Is there not danger of procidentia uteri, to say nothing of undue pressure of the ovaries, etc.? My idea is, that the custom would be more honoured in the breach than the observance.

Hoping my professional brethren will give me credit for my sole motives in this controversy, the good of the better part of our nature, and the advancement of our noble profession,

I am, etc., THOMAS POPE.

Cleobury Mortimer, Shropshire, December 2nd, 1861.

## MEDICAL EVIDENCE IN LAW COURTS.

LETTER FROM RICHARD THURSFIELD, ESQ.

SIR,—I have for many years been subjected to the attacks of Mr. Frederick Hezekiah Hartshorne of this town; but as they circulated only in the neighbourhood in which we were both well known (for I was in full practice here before he was born), I invariably treated them with silence. I should have treated his letter of the 1st instant with the same indifference, but for the remarks you have deemed it fit to make as editor.

I shall forbear detailing Mr. Hartshorne's exhibition in the Madeley County Court, against a poor man, his own tenant, and his next door neighbour; nor will I describe the state in which I found the little boy who had met with the accident. Mr. Hartshorne, in his letter, states that I attended the child immediately after he had withdrawn from the case. This is simply incorrect. My assistant, Mr. Onslow, was sent for about 11 A.M. on the day following the accident. He refused to go, in consequence of my express orders, long ago given, that he never interfered with Mr. Hartshorne or his patients in any way. They sent twice again; and he went on being told the last time that Mr. Hartshorne was no longer in attendance. On my return home, he told me the parents wished me to see the boy. I refused to go; but, when he returned, he said the wife told him Mr. Hartshorne should not attend the child again, and that it was very unkind of me to refuse to go, and, if I would not, she would send over Severn for another surgeon. I then went; and I may remark here that I had occasionally attended the family; and had for years attended the families of both her husband and herself. Do you still think I was in error? The tale of the lady, I know nothing about.

At the hearing of the case brought by Mr. Hartshorne against the father of the child, for the recovery of his bill, I was in the court in my official character as high bailiff; and being called upon to give evidence (of which I had had no previous notice, and which I was compelled to do under a fine of £10), I answered most of the questions put to me; but the evidence I gave was very different in effect to that quoted by Mr. Hartshorne. I gave no evidence whatever as to the treatment of the child by Mr. Hartshorne, or the fee he ought to charge for his services. I purposely abstained from stating any opinion on these points, for the reason stated in your remarks; and, before leaving the court, I was complimented, both by the judge who tried the case, and the registrar of the court, who was present, and who is Mr. Hartshorne's brother-in-law, upon the very fair and proper manner in which I had answered the questions put to me.

I trust to you to insert this in your earliest publication; and, as I have neither time nor inclination to enter into a paper war with any one, much less with Mr. Hartshorne, I shall treat any further com-

munications from him with the silence and contempt I have hitherto done, with this single exception.

I am, etc., RICHARD THURSFIELD.

Proseley, Shropshire, Dec. 13th, 1861.

[Our remarks last week were made on the statement of Mr. Hartshorne; viz., that Mr. Thursfield had said in the County Court, "that, under the circumstances, £3 was a sufficient payment." Mr. Thursfield denies that he gave any evidence whatever as regards the fee. Accepting his contradictions as true, we feel bound to answer his query by saying, that we do not consider him in error in the matter. EDITOR.]

## Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on December 8th.

Clerke, Jonathan, Dublin; diploma of membership dated April 13, 1858.  
Forbes, John, Royal Crescent, Notting Hill; April 10th, 1827.  
Garner, Robert, Stoke-upon-Trent; March 4, 1841.  
Tweed, John James, Upper Brook Street; July 23, 1842.  
Wallis, Frederic, Dext Hill, Sussex; December 16, 1842.

UNIVERSITY OF OXFORD. The degree of M.B. was conferred on the following gentlemen on Dec. 8.

Church, William Selwyn, Christ Church.  
Griffin, Frederick Charles Griffith, Lincoln College.  
Paxton, Francis Valentine, Christ Church.  
Williams, Charles Theodore, Pembroke College.

APOTHECARIES' HALL. On December 8th, the following Licentiates were admitted:—

Allen, Bryan Holme, University College Hospital.  
Bullmore, Charles Forrester, Falmouth.  
Cardey, Vaughan, Church Street, Barnsley.  
Collier, Thomas, Bridgend, Glamorganshire.  
Dove, John Reuben Bathurst, London Hospital.  
Manser, Frederick, Chatham.  
Pearson, George Brigg, Sherburn, Yorkshire.  
Spencer, Charles Henry, Newington, Surrey.  
Speyers, Thomas Charles, Faversham, Kent.  
Wiltshire, Thomas, Abingdon, Berks.

At the same Court, the following passed the first examination:—

Goodall, Joseph, St. Bartholomew's Hospital.  
Langdon, George Charles, St. Bartholomew's Hospital.  
Sargent, James Forbes, St. Mary's Hospital.  
Wright, Edward Seymour, London Hospital.

## APPOINTMENTS.

### ARMY.

Robertson, Surgeon H. F., 40th Foot, to be Staff-Surgeon, *nice* J. E. Young, M.D.  
Young, Staff-Surgeon J. E., M.D., to be Surgeon 10th Foot, *nice* H. F. Robertson.

### ROYAL NAVY.

Brown, Allan, M.D., Surgeon, to the *Endeavour*.

### MILITIA.

Francis, A. O., Esq., to be Assistant-Surg. 1st Derbyshire Militia.

## DEATHS.

BLYTHMAN. On October 20th, at Rio de Janeiro, on his passage from Monte Video, aged 25, Frederick David, third son of \*Robert O. Blythman, Esq., Swinton, Rotherham.

\*KIRKES, William S., M.D., at 2, Lower Seymour Street, aged 41, on December 8.

MANN, George Smyth, Esq., Deputy Inspector-General of Hospitals, Bengal Presidency, at Dacca, aged 47, on October 31.

SMITH. On December 5th, at Hampton, Lady Smith, wife of Sir Andrew Smith, K.C.B.

THOMPSON. On December 4th, at Jarrow-on-Tyne, Sarah Jane, wife of Robert F. Thompson, M.D.

TURTLE. On December 10th, at 9, Colet Place, Mary Gude, wife of Frederick Turtle, M.D.

MR. BRODHURST has been nominated a Foreign Member of the Academy of Sciences of Rome.

**TESTIMONIAL.** At the forty-second anniversary dinner of the Loyal Brunswick Lodge, Brighton, Mr. Richard Rugg was presented with a massive silver loving cup, on resigning the office of surgeon, an appointment which he had held for nearly thirty years.

**SEWAGE OF TOWNS.** A deputation, consisting of parliamentary and municipal representatives of Birmingham, Nottingham, Derby, Wolverhampton, Coventry, Preston, and Bath, had an interview with the Right Hon. Sir George Grey at the Home Office, on Saturday, on the subject of the utilisation of the sewage of towns, and preventing the pollution of rivers and streams.

**A POLITICAL TAPEWORM.** Somebody said that the Schleswig-Holstein question was the political tapeworm of Germany, interminable and always growing again. Felix mas (Prince Felix Schwarzenberg) and grenade bark had failed to remove it, but at last it had been effectually expelled by a dose of oleum Duppellii.

**REQUESTS.** By will Miss Harman, of Tunbridge Wells, leaves to her medical friend, Robert Duncan, M.D., £200; to the Tunbridge Wells Dispensary, £50; to the Maidstone Ophthalmic Hospital, Brompton Consumption Hospital, Eye Infirmary, and Blind Charity, 19 guineas each. The Rev. John Dight, of Folkestone, has bequeathed to the societies in London and Paris for the Prevention of Cruelty to Animals £100 each, and a like legacy to the Devon and Exeter Hospital. Mr. Underwood of Norwich leaves to the Norfolk and Norwich Hospital and the Cumberland Infirmary, each £200.

**ANTI-POISONING BOTTLES.** Mr. Mumbray, of the Pharmaceutical Society, says: "Almost without exception, the whole tribe of inventors have been quietly shelved or altogether ignored. The only really practical 'poison-bottle' I have seen is that invented by Messrs. Gilbertson and Sons. Its form being a wedge, it cannot be stood upon a shelf in company with other bottles, consequently can never be mistaken for another. The shape, too, is very advantageous, as it does not allow the contents to run out, even when uncorked; this is no trifling advantage, obviating as it does the possibility of an upset and damage resulting from corrosive solutions, as iodine, etc.

**ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.** At the annual election meeting, held on Thursday, December 1st, 1864, the following office-bearers were elected for the ensuing year. *President*, Dr. J. G. M. Burt; *Council*, Dr. D. Craigie, Dr. W. Seller, Dr. J. Moir, Dr. R. B. Malcolm, Dr. Alexander Wood, Dr. W. H. Lowe; *Vice-President*, Dr. D. Craigie; *Examiners*, the President, Drs. Craigie, Seller, Wood, Douglas, R. Paterson, Wright, Keiller, Pattison, Cumming, Duncan, J. W. Begbie, Haldane, and Sanders; *Treasurer*, Dr. S. Somerville; *Secretary*, Dr. D. R. Haldane; *Librarian*, Dr. J. M. Duncan; *Curator of Museum*, Dr. T. S. Wright; *Clerk*, Mr. C. Douglas, W.S.; *Auditor*, Mr. K. Mackenzie, C.A.; *Under-Librarian*, Mr. J. Small; *Officer*, T. Marshall. The election dinner took place in the evening, in the hall of the College, in Queen Street, when among the guests present were, the Right Hon. the Lord Provost, his Grace the Duke of Argyll, the Lord Advocate, Lord Neaves, Mr. Whyte Melville, Mr. Bell (President of the Royal College of Surgeons), Dr. Ritchie (President of the Faculty of Physicians and Surgeons of Glasgow), Professors Moir and Spence, Dr. Currie, C.B., the medical officers of the garrison, etc.

## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
TUESDAY....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
SATURDAY....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical Society of London, 8 P.M. Mr. Hunt, "On the Present State of Medical Logic."  
TUESDAY. Pathological Society of London, 8 P.M.—Anthropological, 8 P.M.—Statistical.  
WEDNESDAY. Geological.  
THURSDAY. Royal.

## TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

COMMUNICATIONS.—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

T. F.—The very interesting account of the meeting of German Naturalists and Physicians, lately published in these pages, is from the pen of our talented associate, Dr. Thudichum.

O. T.—The French Medical Association has nothing in common with our own Association, except the name. It is simply a Provident Association, precisely of the same kind as our own Provident Fund. To compare the two Associations, and to draw from the comparison odious and unjust inferences, is necessarily the work either of malevolence or ignorance.

THE ESTABLISHMENT OF A BRANCH OF THE ASSOCIATION AT NEWCASTLE will, we trust, be considered a satisfactory reply to those of our friends (!) who have lately exhibited so much anxiety concerning the state of health of our Association. We can assure them that, notwithstanding all their prescriptions and their much gratuitous advice, we are in excellent health, and never stronger or more vigorous in constitution. Their attentions, etc., sometimes remind us of the anxiety occasionally shown by expectant heirs.

AN ADVERTISEMENT.—Our attention has been called to the following advertisement in a Welsh paper:

"Wanted.—A plain, sober, industrious young man, as an assistant, to visit and dispense. No pop wearing rings will answer the purpose. Applications to be made, stating salary, to Mr. —, Surgeon, —."

BLEEDING IN OLD TIMES.—Guy-Patin was a ferocious bleeder. In one of his letters, he says that he bled one M. Mantel thirty-two times for continued fever. The brother of Bélin, who had the ague, was bled four times; and then, in a fresh attack, eight times, and purged violently at the same time. His own son, who had fever, Guy-Patin "recovered by the aid of twenty good bleedings from the arm and foot, together with a dozen strong doses of purgatives." This son, by the way, died at 41, of consumption.



**TREATMENT OF CLEFT PALATE.**—SIR: Will you allow me a few remarks suggested by your notice of the Odontological Society in your last number. I think there must have been a misapprehension on your part, which is shown in the closing sentence of that article. The statements made to me since the meeting by many of the most influential members present will certainly not bear out that inference. With all due modesty, I must claim for the apparatus which I have constructed, that it fulfils to far greater perfection the requirements set forth by Mr. Sercombe. It possesses all the simplicity that even a child can need to keep it in order. It is formed and vulcanised in a metallic mould, which becomes the property of the patient, and duplicates can be multiplied indefinitely for a mere trifle at any rubber factory, without calling in the aid of the dentist. I think, therefore, the question of durability not worth the discussing. Mr. Sercombe's imputation, that but few dentists possessed the skill to construct my instrument, pays but a poor compliment to the profession in this country. I must, with all my pride for America, claim for my British friends that the majority of them possess all the ability necessary to that end; certainly, as many as would ever be interested enough in the matter to attempt to carry it out. By inserting the above in your JOURNAL, you will correct a wrong impression conveyed, I think, by the former article. I am, etc., NORMAN W. KINGSLEY.

25, Manchester Square, Dec. 12th, 1864.

SIR: The condensed report of my remarks at the recent meeting of the Odontological Society, which appears in your last number, contains two inaccuracies, which, with your permission, I will correct. I expressed my belief, as you state, in the hereditary nature of the deformity; but I did not state that in all instances I had been able to trace inheritance. I said that I had been able to do so in the majority. The second inaccuracy is, that I am reported to have said that Dr. Kingsley's apparatus was adapted for those rare cases in which the soft palate was so far destroyed that no moveable part remained. This is exactly the reverse of what I said. I said that Dr. Kingsley's appliance was limited in its application to congenital fissure of the velum; that it was of no use where all moveable parts had been destroyed by ulceration; whereas mine, which I was comparing with Dr. Kingsley's, was just as adaptable to these cases, which appear to me the most difficult of all to meet, as to congenital fissure.

I am, etc., EDWIN SERCOMBE.

49, Brook Street, W., December 13th, 1864.

**THE SILENT FRIEND SYSTEM SUPPORTED BY DRUGGISTS.**—SIR: I beg respectfully to call your attention to the enclosed advertisement, which is taken from the *Manchester Guardian* of December 2nd, 1864. If respectable druggists in the principal streets of large towns furnish such advertisements, and take such agencies, I think it behoves the profession to treat them accordingly. It would well become the Medico-Ethical Societies in various parts of the kingdom to watch the proceedings of druggists who lend themselves to the diffusion of quack medicines at the same time that they seek to profit by the patronage of legitimate practitioners.

I am, etc., AN OBSERVER.

Manchester, December 5th, 1864.

"THE vigour of youth restored in four weeks, by Dr. Ricord's Essence of Life. This wonderful agent will restore manhood to the most shattered constitution in four weeks. Success in every case is as certain as that water quenches thirst. Sole agents in Manchester: Richards (late Ingham), chemists, 46, Market Street."

**QUACK ADVERTISEMENTS.**—SIR: In an excellent article of the *Times*, these words occur:—"It is hard to believe that powers do not already exist to put down such exhibitions"; namely, quack bills and quack advertisements. Such powers do really exist, although they seem to be but little known. Act 18, George II, c. 15, by embodying the Charter of 5, Car. I, enacts "That whosoever any empiric hereafter, or any such person, whether being a native subject of the kingdom of England or an alien, and ignorant of the art and science of surgery, and not approved of or lawfully admitted to practise surgery, shall affix or put out any pictures, bills, writings, or signs, upon posts, outside, or walls, or other conspicuous place within our said cities of London or Westminster, or either of them, the suburbs and limits thereof, or within seven miles of the said city of London, to call in any persons passing by, travellers, or other persons whatsoever, to have anything done there which, according to our royal intention above declared, belongs to skilful, allowed, and admitted surgeons; then it shall and may be lawful for the Masters or Governors of the mystery and commonality aforesaid for the time being, by themselves or any of their officers whatsoever, to take away, blot out, demolish, and totally cancel all such pictures, bills, writings, and signs, lest our people by any such impostor may be deceived or deluded."

Although it is not to be expected that the President or other officer of the College of Surgeons will blot out or cancel the bills of these empirics or impostors (at least, not in the present day), yet the fact remains, that such advertisements, whether upon walls, or circulated by means of public newspapers, are *illegal*, being a violation of the above Act, and as such, an indictable offence.

The fact of these advertisements being *illegal*, might possibly have more weight with such editors who admit them into their papers, than their outraging all decency, corrupting the morals of the young, and cheating the unwary. It is to be hoped that the recent exposures will cause all respectable papers to cease co-operating with a class of men pronounced as "impostors" by a public Act of Parliament.

I am, etc.,

JAMES GAGE PARSONS, L.R.C.P.E.D.

Bristol, December 5th, 1864.

**VACCINATION CERTIFICATES.**—A correspondent writes:—"I have recently received from the relieving-officer of this parish three books containing certificate forms for vaccination. One or other of these, he informs me, I am to give to the parents of every child vaccinated by me, under penalty of certain fines in default of so doing; and, in order that there may be no mistake in my mind, he tells me of a case in which a medical practitioner was compelled by action of law to pay such a fine, with, I believe, costs. Can you, sir, inform me if such is really the state of the law on this point, so that medical men holding no parish appointment are compelled to furnish the parish authorities with gratis certificates of the result of the vaccination of their private patients?"

Another correspondent, not an union medical officer, has forwarded us the subjoined letter, which has been addressed to the medical men in his district.

"Union, 25th November, 1864.

"SIR: I am directed by the Guardians of this Union to call the attention of all the medical practitioners within the Union to the requirements of Section 4 of the Act 16 and 17 Vic., c. 100.

"That section requires the medical practitioner, who shall have performed the operation of successful vaccination on any child, to give a certificate, in the form provided by the Act, that the said child has been successfully vaccinated: and also to transmit a duplicate of the said certificate to the Registrar of Births and Deaths of the subdistrict in which the operation was performed.

"It has come to the knowledge of the Guardians, that very few only of these certificates are transmitted to the Registrars, although it is considered essential to the well working of the Compulsory Vaccination Acts that the documents in question should be regularly furnished.

"Some time since, the Guardians of the Cambridge Union preferred an indictment against a medical practitioner who refused to furnish the certificate required; and the result was, that the defendant compromised the case, by furnishing the certificate, and paying five guineas towards the expenses.

"In consequence of the great importance of seeing that the Vaccination Acts are duly carried out, I am directed by the Guardians of this Union to inform you that they think it right thus to draw your attention to the matter; and further, should it become necessary to do so, they consider it will be their duty to take steps to enforce a compliance with the section referred to.

"I am, sir, your obedient servant,

"—, Clerk to the Guardians."

It would appear, therefore, that the certificate is required in England and Wales. The question to which our correspondents refer, has also been agitated in Scotland, which has a Vaccination Act of its own; and a writer in the last number of the *Edinburgh Medical Journal* gives the following questions and official answers thereto.

"*Query.* Am I required to keep books, enter cases of vaccination, and make returns to Board of Supervision, as per Sec. xxi, of such cases as I vaccinate as medical practitioner, as well as of such as I vaccinate as vaccinator?"

"*Answer.* I have to inform you, in reply, that the returns required by the Board of Supervision are intended to include only the cases of paupers and others, vaccinated by the vaccinator in his official capacity, by the instructions or orders of the Parochial Board.

"*Query.* Am I, in terms of the Vaccination Act, Sec. xliii, bound to transmit, within forty-eight hours, to the Registrar the particulars of any vaccination certificate which I may grant in my capacity of private medical practitioner; or is this only requisite in those cases which I vaccinate as vaccinator?"

"*Answer.* I have to state in reply, that in my view of the interpretation of the statute, the provisions of the twenty-third section do not apply to your private practice.

"I am, etc.

"(Signed), "JOS. WALKER, Secy."

**THE GRIFFIN TESTIMONIAL FUND.**—SIR: The following subscriptions have been further received on behalf of the above Fund:—Dr. Mackinder (Gainsborough), 5s.; Dr. Bryan (Northampton), 5s.; G. John Hinnell, Esq. (Thingoe), 5s.

Amount previously announced, £108:4:6. Received at the *Lancet* office, £6:14.

I am, etc.,

ROBERT FOWLER, M.D.,

Treasurer and Hon. Sec.

145, Bishopsgate Street Without, December 14th, 1864.

**A PROVINCIAL STUDENT.**—The next primary or anatomical and pass or surgical examinations for the diploma of membership of the Royal College of Surgeons, will take place on the 14th and 21st of January respectively; and the preliminary on Tuesday next.

**A DR. BENJAMIN JUNG** has just published a pamphlet, entitled *Prohibition of Vaccination*. It is dedicated to Dr. Jenner, as follows:—"To the Man-destroyer, Dr. Jenner of England, Importer of Vaccination: Homo vanus et levis, cerebro vacuus et temerarius, mente et judicio carens.

Scientiam profanasti,  
Terram pestifera,  
Populum occidisti!"

## SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 1st of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

T. WATKIN WILLIAMS, *General Secretary.*

Birmingham, December 1864.

COMMUNICATIONS have been received from:—Mr T. WHARTON JONES; Mr R. H. MEADE; Dr W. M. KELLY; Mr F. SERCOMBE; Mr R. H. CORROD; Mr W. PARKER; Mr H. STEEL; Dr HALE SAUER; Mr EDWARDS; Mr R. W. DENN; Mr T. M. STONE; THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON; Dr JOHN THOMSON; Dr ROBERT FOWLER; THE SECRETARY OF THE OTOLOGICAL SOCIETY; Mr WHITWELL; Mr R. THURSFIELD; Dr BOYCE, and C. DE C.

## BOOKS RECEIVED.

1. On Diphtheria and Diphtheric Diseases. By J. W. Walker, M.D. London: 1864.
2. Sixth Report of the Herefordshire Medical Association. Hereford: 1864.
3. Handbook of Dental Anatomy and Surgery. By John Smith, M.D. London: 1864.
4. Manual of Materia Medica and Therapeutics. By J. F. Royle, M.D., F.R.S., and F. W. Headland, M.D., F.L.S. Fourth edition. London: 1864.

## ADVERTISEMENTS.

Just published, crown 8vo, price 2s. 6d.

## The Laryngoscope, Directions

for its Use, and Practical Illustrations of its Value in the Diagnosis and Treatment of DISEASES of the THROAT and NOSE. As Lectures delivered at the Royal College of Physicians. By GEORGE JOHNSON, M.D., F.R.C.P., Professor of Medicine in King's College; Physician to King's College Hospital.

London, ROBERT HARDWICK, 192, Piccadilly.

## Aerated Lithia Water.—

Messrs. BLAKE, SANDFORD, and BLAKE are prepared to supply the LITHIA WATERS (of which they were the original Manufacturers under Dr. GARROD's instruction) of any strength prescribed by the Profession for special cases. Those in constant use contain two grains and five grains in each bottle, either by itself or combined with BICARBONATE of POTASH or PHOSPHATE of AMMONIA.—Also, Potash, Citrate of Potash, Soda, Seitzer, Vichy, and Mineral Acid Waters, as usual.

BLAKE, SANDFORD, and BLAKE, Pharmaceutical Chemists, 47, Piccadilly.

TO PHYSICIANS, SURGEONS, AND DRUGGISTS.

## Brown's Cantharidine Blistering

TISSUE, prepared from pure Cantharidine. An elegant preparation, vesicating in much less time than the Emp. Lytta P. L., easily applied and removed, and will not produce stranguary or troublesome after-sores. It has received the sanction and commendation of many of the most eminent practitioners in the kingdom.—In tin cases, containing ten feet, 6s. 6d.; and small cases of five square feet, 3s. 6d. each.

## BROWN'S TISSUE DRESSING.

An elegant, economical, and cleanly substitute for all ointments as a dressing for Blisters, Burns, etc., and may be called a companion to the above. In tin cases, containing twelve square feet, 1s. 6d. each.

Sole Inventor and Manufacturer, T. B. BROWN, Birmingham. Sold by all Wholesale and Retail Druggists and Medicine Agents throughout the British Empire.

ESTABLISHED 1848.

## Mr. J. Baxter Langley, M.R.C.S.

First, date of King's College, London; PROFESSIONAL AGENCY, 50, Lincoln's Inn Fields, W.C.

## Medical Assistants.—Wanted

Immediately, several competent Indoor and Out-door ASSISTANTS, qualified and unqualified, for Town and Country. No charge for registration, but references in all cases required. Apply to Mr. Langley, 50, Lincoln's Inn Fields, W.C.

## Competent Assistants provided

without delay, free of expense to the Principals. No gentlemen recommended whose antecedents have not been inquired into. Apply to Mr. Langley, 50, Lincoln's Inn Fields, W.C.

## Excellent Family Practice in

Northamptonshire for transfer. Receipts, about £750 per annum, steadily increasing. Patients wholly of a good class. Opposition small. Three months introduction. Address, "S., 1047," Mr. Langley, as above.

## Death Vacancies for Sale.—

Several most eligible Death Vacancies in London, with and without Appointments. Well established connexions with open surgeries. With prompt purchasers having ready money at command, liberal terms would be made. Address, Mr. Langley, as above.

## Partnerships for negotiation.—

Mr. Langley is authorised to introduce to several large Practices, professional gentlemen of unquestionable attainments, and possessing capital from £500 to £3000, as Partners, or as Assistants with a view to partnership and succession. Address, as above.

## Death Vacancy in Staffordshire.

Receipts of the deceased, about £500 a year. Appointments, £100, capable of immediate increase. The Practice has been efficiently kept together. Large house, with garden, stabling, and two acres of land. Rent £2. The practice has been established seven years, and is situate in a good and improving town. Very reasonable terms would be accepted from a suitable successor. Address, "S., 1043," Mr. Langley, as above.

## In the best part of Leicestershire.

A well established Practice, capable of complete Transfer. Receipts £600 a year. Appointments £250. Excellent house, rent £15. Terms £150. Apply to "S. 1," Mr. Langley, as above.

## In a large Town in Notts.—A

well established Family Practice, realising upwards of £1000 a year. Appointments £70. Complete introduction. Good house, etc. The successor should be a graduate of Edinburgh. Address, "1,005A," Mr. Langley, as above.

## In a large Village in Devon. A

Practitioner in failing health is willing to treat for the succession to his Practice, which has been established nearly twenty years. Receipts, upwards of £100 a year. Appointments, £120. Good house, garden, coachhouse, and land, at a very moderate rent. A great number of good families in the neighbourhood. Premium, £500. Address, "S., 1044," Mr. Langley, as above.

## In Surrey.—An Excellent Nu-

CLEUS for Transfer upon very easy terms. Double qualifications necessary. Salary from public appointments £150 a year, exclusive of extras. A few drugs and fixtures to be taken, valued at about £50. No premium required. Address, "S., 1,009," Mr. Langley, as above.

## In a good Town in a well fre-

quented Island on the coast. A Family Practice for sale. Receipts average about £300 a year. The town contains upwards of 10,000 inhabitants, and 70,000 visitors during last season. Premium, 250 guineas. Address, "S., 1,010," Mr. Langley, as above.

## West End Practice or Partner-

SHIP. £600 a year. Mr. Langley is authorised to negotiate for the Transfer of the above, or the introduction of a Partner. Apply at the Professional Agency, as above.



# Illustrations

OF

## HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

### FARRINGTON DISPENSARY.

#### NON-MERCURIAL TREATMENT OF SYPHILIS.

Under the care of R. W. DUNN, Esq.

CASE I. C. G., aged 49, a single woman, had indulged freely in alcohol all her life, but lived well. She came under my care last June, suffering from constitutional syphilis. She had received no treatment for the primary disease; and when I first saw her, she was suffering from syphilitic psoriasis, attacking principally the face, body, arms, legs, and abdomen. She had ulcerated sore-throat, mucous ulcers on the lips, ulcer of the tongue, and enlargement of the inguinal glands on each side. She had lost hair; and was also suffering a great deal from mental anxiety. I ordered her to take five grains of chlorate of potash in water three times a day; and to apply to the psoriasis an ointment of six grains of nitric oxide of mercury and six drops of creasote to an ounce of lard.

July 7th. She was improving except the throat, which still was ulcerated. I touched it to-day with nitrate of silver; and directed her to continue the medicine.

July 21st. An ulcer had appeared on the right leg. I ordered it to be dressed with the ointment; and the medicine to be continued.

July 28th. She was much better. From this time till September, she went on with her medicine regularly, and was then discharged quite cured. No relapse has since occurred.

CASE II. N. S., aged 19, contracted a primary sore some months before he came under my care. He had cured himself by lotio nigra; but had received no internal treatment. He applied to me on October 6th, having a swelling in the right groin, and a rash upon his skin. Upon examination, I found that he had an enlarged gland on the right inguinal region, and syphilitic psoriasis, principally on his body, legs, and arms, slight sore-throat, and loss of hair. I ordered him to paint the gland every other night with iodine paint; to take five grains of chlorate of potash three times a day; and to apply the same ointment as in the former case to the eruption on the skin.

Oct. 13th. The enlargement in the groin was nearly gone; and the eruption much better. He was ordered to continue the remedies.

Oct. 27th. The gland was quite well; the eruption much better. The remedies were continued.

Nov. 24th. He was discharged cured.

CASE III. J. J., aged 11 weeks, was the second child of a woman who had been suffering from the same disease. She lost her former child. The present patient had been treated with grey powder and mercurial ointment. Upon examination, I found that the infant had syphilitic psoriasis on its legs, buttocks, and arms; it snuffled much, looked emaciated, with a wizened, old appearance. I ordered it, on Sept. 20th, to take three times a day a teaspoonful of a mixture containing twenty-four grains of chlorate of potash in an ounce and a half of distilled water.

The child was discharged cured on Nov. 24, 1864.

### BIRMINGHAM AND MIDLAND EYE HOSPITAL.

#### THE TREATMENT OF GLAUCOMA, ETC., BY "DIVISION OF THE CILIARY MUSCLE."

Under the care of J. VOSE SOLOMON, F.R.C.S.

[Continued from page 598.]

CASE XVI. *Glaucoma. Division of Ciliary Muscle. Temporary Relief. Relapse.* James Taylor, aged 22, a strong and healthy labourer, admitted into the Eye Hospital on Dec. 4th, 1860. Three weeks previously, he went to bed quite well; towards morning, severe aching pain, attended by lachrymation, seized the left eye. At daylight, the eye was found blind, even to firelight. He had not had rheumatism, or gout, or syphilis.

*Present State.* There was acute external congestion of the globe, attended by a copious serous discharge. The humours were turbid, more especially behind the iris; the pupil was moderately dilated. The eye was blind to the light of day. The eyeball was hard; but not of stony hardness. He had no pain. The light of a lamp, reflected by the ophthalmoscope, failed to penetrate the pupil.

The ciliary muscle was divided at a right angle with the rim of the cornea. A little vitreous humour escaped; the chambers became clear; and the patient could see features.

December 6th, 4 P.M. The eye was examined; the patient said he could distinguish features.

December 9th. The tension of the left was the same as that of the right eye.

December 13th. Vision had improved up to this date. To-day, it was more dim; the humours were turbid. He was ordered to take quinine.

December 21st. There was still considerable turbidity of the humours. Vision was very misty.

December 24th. He was made, at his own request, an out-patient. He attended for several weeks. The hardness returned to the eye; with confirmed amblyopia.

These notes have been abridged from voluminous records taken by Mr. Sidney Proctor, at that time house-surgeon of the hospital, who, like myself, took the greatest possible interest in the case. Unhappily, the result, to our serious disappointment, was precisely the same as in a parallel case which had been recently treated by one of my colleagues with medicines alone.

CASE XVII. *Partial Staphyloma of the Cornea cured by Division of the Ciliary Muscle. Relapse. Iridectomy. Permanent Relief.* James Dews, aged 34, collier, was admitted into the hospital on Nov. 20th, 1861, with a large staphyloma of the cornea, the result of an injury thirteen weeks previously. It was at once removed by the knife, and the patient discharged cured on December 4th. At this date, the surface was flat, and there was a good deal of clear cornea above it; behind which it was designed, at a future day, to make an artificial pupil.

On December 21st, he returned to the hospital with the eye much inflamed (catarrho-rheumatic ophthalmia). The new corneal material had yielded to the pressure from the increased secretion, and a large staphyloma was again present. Leeches, and calomel and Dover's powder, at bedtime, were ordered.

December 22nd. Division of the ciliary muscle was performed; much vitreous humour escaped.

December 25th. The staphyloma was cured.

Vitreous humour protruded through the wound up to Feb. 5th, 1862, when it had healed; and the cornea was flat.

Feb. 8th. He was made an out-patient.

Feb. 16th. The staphyloma had returned; and on the 20th, iridectomy was performed.

Feb. 25th. The staphyloma was gone. He had perception of light.

There was no relapse after this date.

CASE XVIII. *Acute Choroido-iritis in a Diabetic Subject. Division of the Ciliary Muscle: no Relief. Iridectomy: Relief to Pain and Tension, etc.* A feeble young woman, aged 26, who was suffering from diabetes (urine of specific gravity 1035), applied at the hospital May 28th, 1861, with acute choroido-iritis. There were great tension and considerable external congestion; the ciliary veins were large; the iris and chambers dull. She had agonising pain. Division of the ciliary muscle was performed. Bark was administered internally; and atropine drops used.

In three days (May 31st), the pupil was of medium size; the chambers were dull; the globe of stony hardness; the conjunctiva thickened. She had great pain. Iridectomy was performed. The forceps brought out a sheet of lymph; after which, the chambers, pupil, and iris, became clear. The conjunctiva cut like brawn. Hot fomentations were applied for a few hours. Beef-tea, eggs, and milk, were ordered.

June 1st. There was less tension; but trifling pain since the operation. The external congestion was gone. No vomiting occurred from chloroform.

June 3rd. There was no pain. The tension of the eye was below normal. The wound was healed. The vitreous humour and iris were turbid. She recognised fingers.

June 4th. The chambers were filled with turbid lymph as on admission. At the upper part of the coloboma, there was a communication between the two chambers. She had no pain; the globe was flaccid. She perceived the shadow of fingers. At her own request, she was permitted to return home. On that day, the iris was recovering its lustre; a sheet of greenish-brown lymph filled the whole of the coloboma, except at the upper part.

June 15th. The iris and humours were bright. Tension was nearly the same as in the fellow eye. She had perception of shadows.

CASE XIX. *Myopia complicated by Glaucoma. Division of the Ciliary Muscle. Blindness and continued Tension. Left Iridectomy. Tension Reduced.* I saw, in June 1861, in consultation with the late Dr. Skerrett, Mrs. B., aged 58, who had been near-sighted all her life. For the last eight months her vision had been failing; it was worse at one time than another. Everything was in mist. With the right eye, small pica was read at six inches, not beyond. The pupil was dilated and fixed. The left eye was blind, except to shadows. Both globes were hard. The irides were dusky grey. The conjunctival rim of each cornea presented patches of redness. In the right eye, the vitreous humour was turbid; the optic nerve was white. The retinal vessels consisted of two short branches; one extended to the nasal side, and one to the inferior part of the fundus. A small staphyloma posticum bordered the lower rim of the right optic (inverted image). The fundus of the left eye did not admit of illumination.

July 1st. Division of the ciliary muscle was performed on the right eye, and iridectomy on the left.

At the end of twenty days, there was slight enlargement of field of vision of right eye. Vision was much the same, but more steady. It did not go and come. Tension was as on day of operation. It then relaxed; and, while I was from home in July, sub-acute inflammatory glaucoma attacked the eye, and it became hopelessly blind. The tension was as before operation. In the left, the tension was normal.

CASE XX. *Glaucoma: Division of the Ciliary Muscle. No Relief: Amaurosis.* T. W., aged 42, of Dudley, was admitted October 2nd, 1863. The right lens was dislocated into the lower part of the vitreous humour. Tension  $2\frac{1}{2}$ . On the 13th, the lens was extracted; some vitreous humour escaped. On October 29th, he was made an out-patient. Tension  $2\frac{3}{4}$ . November 10th. Tension was diminished.

November 17th. A pea-issue was placed in the right arm.

November 24th. Tension 3. "Division of the ciliary muscle" was performed.

December 8th. He was readmitted with glaucoma of the left eye. Its conjunctiva was injected. Tension 2. He had iridescent vision. The right eye was excised.

December 13th. Iridescent vision was gone. The iris was convexed; the pupil dilated, but not widely. Tension 2. There was no cupping of the optic nerve. A large paracentesis corneæ was performed.

December 31st. The medical treatment (leeches, and mercury to slight ptialism) had had no effect. Tension 3. The conjunctiva was injected; the pupil dilated and muddy; the iris dull and of leaden hue; the ciliary vessels much gorged. In order to relieve them, "division of the ciliary muscle" was performed. A free discharge followed, but little blood. The vitreous humour was still firm.

January 8th. There was no remission of tension; nor improvement of vision, which was limited to perception of shadows. He refused iridectomy, and returned home.

October 1864. He has amaurosis, and is unable to earn his living, or take care of himself in the street. He has not done a day's work since the accident.

#### THE TREATMENT OF GLAUCOMA BY IRIDECTOMY.

Under the care of J. V. SOLOMON, F.R.C.S.

CASE XXI. *Congenital Myopia: Glaucoma (choroido-scleritis?) after Fever: T  $2\frac{1}{2}$ . Iridectomy: Relief. Recurrence of Tension.* Sarah Emery, healthy, aged 8, of Shenstone, near Lichfield, was admitted August 16th, 1864. She read Roman type (Jäger's No. 20) when held at from four to five inches from the eye; nothing smaller. She experienced flashes and iridescent vision. Tension 2— $2\frac{1}{2}$ . The optic discs were uneven, and of a greenish grey colour. The retinal circulation was anæmic. On the inner side of the discs was a staphyloma. The value of the vision in the two eyes was equal.

August 19th. Iridectomy of the upper circle was performed on both eyes, in the presence of Dr. Anderson and others, without the slightest accident.

August 24th. The wounds were healed; the eyes free from irritation. She was allowed to leave her bedroom for the day-ward.

August 28th. She made out No. 16. The photopsia was undiminished. Tension was normal.

September 2nd. She was made an out-patient.

September 13th. Tension  $2\frac{1}{2}$ ; there was less photopsia. She read canon type (No. 18), and a few words of 16 (Jäger's two-line great primer). On examining to-day the patient's sister, aged 14, I found that she was myopic, and her eyes presented tension 2. She had a small staphyloma posticum in each eye. The optic discs were of a yellow shade. Photopsia was present. With concave 36", brilliant type (No. 1) was read with facility. My operation would greatly improve her.

September 27th. The patient read 16 well. Double pica, or No. 14, was impossible.

October 25th. Tension  $1\frac{1}{2}$ —2. She read with difficulty 16. For the last month, the photopsia



had diminished. The retinal circulation was improved(?).

**CASE XXII. Glaucoma of the Right Eye, of three years' duration. T 3. Iridectomy in 1858. Vision the same in 1864 as before the Operation. Glaucoma of the Left, of seven years' duration, ending in Disorganisation. Enucleation of the Globe on the same day as the Iridectomy.** Mr. Jas. C., aged 59, an ornament of papier maché, was operated upon on Whit Monday, 1858, for chronic glaucoma, by iridectomy. A broad piece was removed from the upper part of the iris. The left globe, which was blind, hard as stone, cataractous, and disorganised, was enucleated at the same time; chloroform being used. By this treatment, the iridisation, recurrent obscurations, photops, and stony hardness of the globe, which were present on admission, were removed. The right eye had been declining for three years, and the left seven years, before the iridectomy. He could not fix the date of loss of useful sight in the left eye.

November 7th, 1864. The patient has been obliged since the operation to wear a fourteen-inch convex glass, which is blackened over, except for a space in the centre of two lines' diameter. The eyeball being prominent, and the lids very wide apart, the upper part of the cornea is not covered. Hence circles of dissipation are formed on the retina; and vision is confused, without the use of stenopæic spectacle.\* The field of vision, on the inner or nasal side, is obstructed by a dark cloud; on the outer, by "a gloom". A little above and below the horizontal meridian, the field is obstructed by "a red shade". Consequently, it is only just in the centre that he sees clearly; and it requires a little time to bring the axis of vision on a line with the transparent circle (pupil) in his spectacle-glass; but, having attained this, minion type can be read fluently. He reads small pica (Jäger's No. 8) for half an hour before fatigue ensues. All these symptoms were present before operation. On testing his field of vision in the usual way, I find he can see only the tip of the finger, which is held in front of the eye. His field of vision is limited to a single spot, of not more than one inch in diameter. The patient, who is an intelligent man, remarked that he considered the vision to be about one-third what it was when perfect. His mode of progression in the street resembles very much that of a blind man.

The lens presents, all round the margin of its anterior surface, circular patches of opacity (pigment?), of similar size, figure, and density. They have been stationary six years. The optic nerve is small, and of the same colour as the surrounding choroid, except at the blind spot. The retinal veins are small, of good length, and few in number. Arteries invisible. No cupping apparent. The pupil is very large, the greatest width of the iris being not more than three-quarters of a line.

The patient has not done an hour's work since the iridectomy. He considers his visual power to be exactly as it was previous to operation. He is now sixty-three years of age.

**CASE XXIII. Great Tension: Contracted Field of Vision: Engorgement of the Choroido-retinal Venous Systems. Glaucoma? Iridectomy. Relief not permanent.** Edward V., aged 33, a clerk from Cumberland, was admitted December 19th, 1863. He was fair, florid, and perfectly healthy, except in his vision. The tension of the right eye was great, but susceptible of some compression (T 2). The field of vision

on the temporal side was good; on the nasal, six inches. He read brilliant type (Jäger's No. 1); and with ease No. 2. He accommodated for small pica (No. 8) from seven to fourteen inches. The optic nerve was grey. The retinal vessels, which apparently emerged from the nasal rim of the optic disc (inverted image), were much gorged; also the choroid, but less so than in the left eye. The retinal arteries were rather small. There was no pulsation; no cupping. The left eye presented tension 2. The ophthalmoscopic appearances were the same as in the right, but the congestion was much greater. The vessels were of normal length and number. On the temporal side, features were seen as shadows; on the nasal, the form only of the head and face could be discerned. Vision was best when he powerfully converged the globe.

His sight was perfectly good up to seven months previously, when he first noticed aching in the globe from work. Four months before admission, he could read only for twenty minutes at one time. The left eye was most dim. He had had supraorbital pain occasionally, but not severely, for three months. A candle-flame presented a halo. There was no iridescence; no vertigo or headache. It occurred to me, that the ophthalmoscopic appearances were indicative of obstruction in the venous sinuses of the brain. I therefore ordered a seton in the neck, and the administration of iodide of potassium.

On December 25th, while reading, sight failed him altogether.

January 2nd, 1864. The symptoms were as on admission. The patient had come nearly two hundred miles for treatment; and iridectomy might assist in clearing up the diagnosis; and, if the symptoms were not ameliorated, no harm would accrue by performing it on the left eye. Would tension be reduced? A broad iridectomy was made on the upper and outer circle of the iris; fully one-sixth of that membrane was removed close to its origin. The bent triangular knife was passed obliquely through the sclerotic, close to the front of the origin of the iris. No accident occurred.

January 7th. He had acute scleritis.

January 14th. He saw face and features more distinctly, when opposite to his nose, than he had yet done. The nasal field was from four to six inches. Tension was diminished, but still *plus*; it was decidedly less than in the right eye. I removed the seton.

January 15th. He was ordered to go out of hospital for a few days, and was readmitted on the 23rd.

February 16th. In the left eye, the nasal field was 5½ inches; the temporal nearly a yard. With an 18" convex glass, he could make out letters of Jäger's 16, or two-line great primer.

February 20th. He was discharged.

August 16th. With the left eye he read letters of No. 20, assisted by an 18" convex lens. The eye was blind unless he greatly inverted it. The engorgement of the veins and of the choroid was much diminished. Tension 1½. Vision was reported to be more steady. The right eye could not now read minion (No. 4); but, with an 18" convex lens, No 2 was read. The nasal field was four inches; temporal, three feet.

The right eye is now (October 1864) under treatment, and will be duly reported.

**EARLIEST DRUG SHOPS.** The first shop for the public sale of medicines of which history reports was established at Bagdad in the year 765, by the Arabian Caliph Almansor. The first establishment of that kind in the West was the "Apotheke," which existed about the year 1364 in the then free town of Uhn in Germany.

\* It is under these circumstances that I recommend a portion of the eyeball should be covered over by "gluing" the conjunctiva, and so making an artificial pterygium. If it be deemed desirable to obtain admission to the conjunctiva to the cornea, it is only necessary to divide the pterygium of the latter.

# Original Communications.

## SELECTIONS FROM LECTURES ON OPHTHALMIC SURGERY.

By HAYNES WALTON, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

### PROTRUSION OF THE EYEBALL.

I STILL proceed with protrusion of the eyeball from causes within the orbit.

*Tumours.* Under this I class the several varieties of encysted, osseous, and encephaloid tumours. In the great majority of instances, the protruded eye is forced out by the one or the other of them; indeed, any other cause may be called quite exceptional. It is of the utmost importance to a patient that there should be a correct diagnosis of these several tumours; and it is seldom that an experienced surgeon is deceived, if he will but take a little trouble, and has the chance of watching the disease.

Of the *Encysted Tumour* I will speak first. It is what is called the sense of fluctuation that must be relied on here above all other symptoms to determine the character; and, therefore, the discrimination will be more easy and certain in a later than in an earlier stage.

It should be a rule to get rid of, by destruction or removal, all cysts that are growing, or are injurious. But this is not so easy as might be supposed; and in the attempt there is risk of local and constitutional disturbance. After a large experience in these cases, my present plan is not to attempt in the first instance to dissect out the cyst, except it be small and superficial; but to open it by a free incision, and wait for the result. This will be favourable, or not, according to the nature of the tumour, the state of its walls, and the character of its contents. The common termination of those that are thin-walled is the destruction of the secreting membrane by supuration. A delicate cyst will break down rapidly; and it is said that the cyst-walls may adhere. I do not, in the first instance, attempt to produce suppuration by the introduction of lint and other substances, or the application of an escharotic; I rather trust to a natural process, lest the consecutive inflammation prove very severe. At the same time, I do not hesitate, when I think it necessary to prevent premature closure, to insert in the opening, for a day or two, a few shreds of lint. This is a safe and cautious mode of proceeding; and, if it does not effect all that is needed, a better knowledge of the nature of the disease is obtained. We cannot be too careful and cautious in operating on the orbit. Death has been caused by what would be called simple operations; and I have over and over again seen patients placed in a state of great danger, followed by tedious recovery, when I had no reason to expect such a course.

I should next resort to the use of an injection; and I have not been able to prove, of the many drugs which may be called to our aid, any superior advantage of the one over the other. Different men prefer different ones. One is perhaps taken up by mere chance or fashion, and then spoken of as the wonderful agent. I usually employ alum.

Although I will not say that a surgeon ought not to undertake to remove a cyst that he may find

superficial, rather than inject it, any more than I will pretend to lay down any surgical rule that is not to be departed from—I feel no hesitation in expressing myself to the effect that the deeply seated ones had better never be attempted to be dissected out; for I never saw one that passed to the apex of the orbit ever entirely removed. In every case, the operator has been disappointed. But, besides the depth, the relations of a tumour may render the detachment impossible, without taking away some of the contents of the orbit, not even excepting the globe of the eye. My opinion is, too, the more fortified by the fact that, during the last thirteen years, I have had several of these cysts, of very various depths, directions, and capacities; and not in an instance have I failed to effect a cure by injections. In some, the eye was enormously protruded, and vision more or less impaired from the pressure on the eyeball, sometimes almost extinct. It must not be expected that a single injection will effect a cure always. Sometimes it will, and a most remarkable example of this is to be found in a paper of mine in the *Medico-Chirurgical Transactions*; but the treatment, including also nice manipulating, the keeping of the orifice sufficiently open, perhaps compresses, etc., may extend over weeks and months.

Under this head of encysted tumours, I include hydatids, accephalocysts, and echinococci. Their nature can never be determined till a puncture or an incision is made; for they present symptoms the same as those arising out of any kind of fluid tumour. When they are thus detected, the free use of hot water with a strong syringe will wash out much of the contents. The cyst readily suppurates.

*Fatty Tumours* are not common in the orbit—that is, at all deeply seated; but I have met with some small ones about the margin. Their removal is imperative, because of the almost certain increase. When it is possible, they should be removed within the eyelids, to prevent deformity.

There can be no doubt that the eyeball may be thrust out by a simple growing or increase of the orbital fat, without the formation of a distinct tumour within a capsule—I mean a true fatty tumour—as does sometimes happen in other parts of the body, whereby a swelling or tumour is formed, and relief may be afforded by reducing the redundant mass.

*Exostosis of the Orbit* is rare. All parts of the orbit are alike liable to it; and, as with exostoses in other situations, it varies in size and other physical properties, in the mode of attachment, having a narrow or a broad connexion with the skull, and in density; whence the division into varieties, according as it is ivory-like, made up of bone and cartilage, or of bone and fibrous tissue. When an exostosis in the orbit is hidden from the touch, there is no point of diagnosis by which it can be distinguished from any other tumour that protrudes the eyeball. It may be painless, or very painful; this being due to its position, whether pressing on a nerve, or not. The slowness of growth is the only circumstance that may cause a suspicion of its nature. Neither can it be always determined whether an exostosis will admit of being removed, till a portion of it has been exposed, and the nature and extent of its attachment ascertained. In what may be called the simple form of exostosis—that which is mere bony texture growing at the extremity by a plate of cartilage—division at the neck suffices. In that composed of fibro-cartilaginous structure within the expanded bone, either the bone to which it is attached must be removed, or the tumour completely extirpated.

No very precise rules can be laid down for the manner of operating; but this may be said, that more may be done with the bone-forceps, especially



if the base of the tumour be small, than with any other instrument; and the forceps should have short and narrow blades, and long handles. It is judicious to be prepared with two pairs, the one straight, the other convex or angular. In addition to these, there should be provided a variety of small saws and gouges, of different shapes and sizes; in short, all the modern instruments that are used for operations on diseased bones. The upper wall of the orbit, and the inner, require the greatest care in operating; but, as elsewhere, the surface throwing out an exostosis is generally thickened.

*Encephaloid Tumour.* This comprises an extensive subject, and therefore, in a short lecture, I can do no more than allude to certain points, those which it most concerns the surgeon to know, and which bear directly on practice.

All the forms of cancer do not occur in or around the eye with equal frequency. Colloid cancer has never yet been found in the eye or orbit. Scirrhus is exceedingly rare as an affection either of the eyeball or of its appendages. Epithelial cancer attacks only the eyelids or conjunctiva. Recurrent fibroid disease has been met with as an intra-orbital tumour in one instance only that has come to my knowledge. Medullary cancer, in the form of encephaloid or melanosis, may attack either eye or orbit; and it is the one or the other variety, more particularly the former, which is present in the great majority of cases.

As soft cancer is a common cause of ocular protrusion, so, perhaps, is it the most difficult to be diagnosed in the early stage, especially by the inexperienced. But, before I proceed further, I will go into a question that has perhaps occurred to many of those who hear me. Does the position of the eyeball in any way determine the nature and situation of the cause of the protrusion? In obscure cases, where there is not any indication to be gathered from the state of the eyelids, the direction of the protrusion might somewhat assist in diagnosing the nature of the case, by localising it more certainly. But such evidence may be wanting; and in no instance can it be solely relied on, because of the irregularity in form and unequal development of morbid growths. In estimating the value of doubtful physical signs, the dissimilar axes of the eyeballs, and of the orbits, demand attention; while the manner in which the globe is tied by the oblique muscles, and the anatomical relations of the optic nerve, will influence the direction it will assume from pressure posteriorly. Displacement inwards is more readily effected than in any other direction. When, from the commencement, the displacement is lateral to the axes of the eyeball, it is reasonable to presume that the force also is lateral. Direct protrusion will in general prove the most embarrassing; for with bony and other growths at the side of the orbit, within certain limits of size, and situated rather posteriorly, the eyeball may be pushed forwards without any lateral displacement. This, I presume, must be attributed to the mechanical properties of the fat in the orbit. Yet, if the only symptom be direct protrusion, until further evidence to the contrary, the cause must be considered to be seated at the back of the orbit; I will not say the apex, for that is indeed a very rare position. Certainly, in soft cancer, the direction of the protrusion does not in the least assist in diagnosis.

Malignant tumours originating deeply in the orbit exhibit no peculiarity in the physical changes which they produce in the orbit or orbital appendages of the eye, by which they can be at first distinguished from simple tumours.

In some instances, however, the rate of progress, or other peculiarities in any given case, may pro-

duce the suspicion of malignancy at an early period.

It is necessary to say something about the seat of malignant growth. It may be in any part of the cellular or adipose tissue, or even to spring from the optic nerve while the eyeball is yet sound. Then the cancer may originate in the frontal cells or from the antrum of Highmore, and make its first appearance in the orbit. When, however, the disease advances and protrudes laterally, or at least can be felt tolerably, the true nature can generally be made out by the peculiarity of fixedness and immobility. It seems as if it grew from the side of the orbit, and from a large base. Of course, any constitutional effects of the malady, and any development of blood-vessels, assist to a right conclusion; but these appear only late. The rapid growth, then, the immobility, and the youth of the patient, are the signs to be relied on. I have very rarely seen an example after forty years of age, and the majority have occurred to me between the ages of fourteen and thirty.

It is a momentous question respecting what is to be done. Most certainly, my experience is against operating, as a rule. If an operation will only relieve pain, or if it will arrest bleeding, and for a time prolong life, or if the pressure of the morbid growth on the brain is productive of any ill consequences, I should operate. As soft cancer is merely the local evidence of a poison at work with the system, any idea of curing the disease by operation can be only attended by disappointment.

*Periostitis.* Inflammation of the periosteum of the orbit, which must, I presume, be always more or less combined with inflammation of the bones, may protrude the eyeball; and, although such disease may follow traumatic injury, constitutional causes, such as struma, and syphilis in particular, generally produce it; but, whichever it may be, the diagnosis is seldom obscure, if proper investigations be instituted.

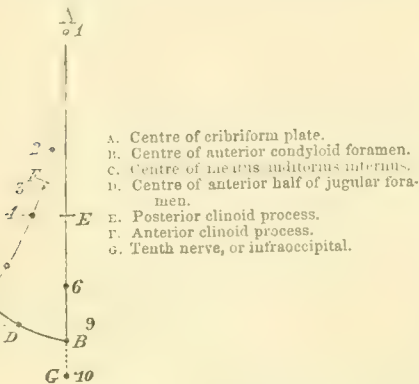
*Disease of the Optic Nerve* has been a cause of protrusion. A tumour of the size and shape of an olive, just a little behind the sclerótica, and consisting principally of thickened neurilemma, the nerve-tubes being unaltered, had displaced the eyeball upwards and outwards. The discovery was made in a dissecting-room.

## ON A NEURO-MNEMONIC TRIANGLE AT THE BASE OF THE SKULL.

By WALTER GAESTANG, M.D., F.R.C.S. Edin.,  
Blackburn.

THE Neural Triangle, to which the purport of this communication, written for mnemonic purposes a few years ago, is the invitation of the young dissector's attention for a moment, includes a small portion of the anterior, middle, and posterior fossæ, at the base of the skull, corresponding, respectively, to the encephalic lobes. Along its boundary-lines, as in the subject before me, are seen the whole of the cerebral (intracranial) nerves of each side, at situations that are internal to the dura mater, and at which we usually find them to be divided with the scalpel, on removing the brain from the cavity of the cranium. It is to this fact that the triangle owes its mnemonic-anatomical significance; and the practical application of it by the inexperienced student of anatomy will, I apprehend, remove one of the many causes of his early dissecting-room perplexities, and will enable him to remember with certainty no inconsiderable item of cranio-neural anatomy, more expressly with reference to the relation of parts.

Posteriorly, the triangle is bent in the direction of the foramen magnum, and rests on the inner third of the posterior surface of the petrous portion of the temporal bone, and the eminentia innominata of the occipital. The illustration submitted, without any pretension to rigid accuracy, is deduced from the left side of the cranium, where the sides composing the triangle are found to have the relative admeasurements of the diagram adjoined, of which the scale of parts has been reduced to one-half; and they observe the following courses.



Curvilinear in direction, the external boundary is viewed as coursing from the apex of our triangle, along the outer margin of the groove for the olfactory nerve, on the cerebral surface of the lesser sphenoidal wings, and thence across the optic foramen, by the internal surface of the anterior clinoid process, and upon the superior angle of the petrous portion of the temporal bone, terminating at the centre of the meatus auditorius internus. This line, at its commencement, is the guide—first, to the olfactory bulb, and to the nasal branch of the ophthalmic nerve; secondly, to the ophthalmic nerve and ophthalmic artery, where these enter the optic foramen; thirdly, to the oculo-motory nerve, which pierces the dura mater just at the outer side of the anterior clinoid process; fourthly, to the trochlear nerve; fifthly, to the triple-facial nerve; and sixthly, to the facial and auditory nerves, and internal auditory branch of the superior cerebellar artery.

Again, line 1-9, commenced anteriorly at the centre of the left division of the cribriform plate of the ethmoid bone, runs almost directly backwards; passing, on the bare bone, by the external side of the middle clinoid process, along the internal margin of the furrow, seen on the basilar portion of the occipital bone, for the inferior petrosal sinus, then close by the eminentia innominata, down to the centre of the anterior condyloid foramen. If we should thence prolong this line to nearly one inch, it will lead, as at 10, to the place of exit, from the spinal canal, of the suboccipital nerve—sometimes regarded as the tenth cranial nerve—corresponding with a groove behind the superior articular process of the first cervical vertebra. In the tract of this line are seen, from before backwards (*vide diagram*), in the recent preparation, the olfactory bulb, and the sixth and ninth cranial nerves.

Lastly, the line 7-9, which constitutes the base of the triangle, connects the two former. It runs directly inwards, downwards, and backwards, and crosses in the middle of its course, the anterior division of the foramen lacerum posterius, which affords exit to the trunks of the eighth nerve, consisting of the glosso-pharyngeal, pneumogastric, and spinal ac-

cessory nerve. As a whole, the foramen, it may be remarked, transmits, additionally, the blood from the lateral sinus into the internal jugular vein, the inferior meningeal branch of the occipital artery, and the posterior meningeal branch of the ascending pharyngeal artery.

## Transactions of Branches.

### SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEDICAL MEETINGS.

#### ABSTRACT OF A CASE OF SEVERE INJURY TO THE BRAIN.

By FREDERICK FRY, Esq., F.R.C.S.

[Read October 2-6, 1864.]

THOMAS H., aged 22, a labourer, was admitted into the West Kent General Hospital at Maidstone, on December 29th, 1859. He was watching the blowing up of a blacksmith's anvil. The wooden plug splintered; and some pieces entered the patient's head through an aperture in the right supraorbital ridge sufficiently large to admit the insertion of the little finger. Several fragments of wood were extracted by forceps. Cerebral substance escaped. The patient was conscious. No bad symptoms occurred, and he was sitting up in a few days. Some small pieces of bone came away with a slight amount of suppuration. He was discharged on February 7th, 1860, forty-one days after the accident. There was only a slight oozing from the aperture at this time.

He attended as an out-patient for two or three months. Subsequently, he worked for five weeks at brick-making, but was compelled to desist because of pains in the head. He became an out-patient for the second time, and attended the hospital for three or four months. He was then seized with intense vomiting, failure of the powers of speech, strabismus, and difficulty of walking. He now kept his bed at his own home, and was visited by the house-surgeon. The contents of the rectum and bladder were voided involuntarily, and the patient became almost idiotic. He died whilst taking food, apparently choked. His death occurred in February 1861, upwards of thirteen months from the receipt of injury.

POST MORTEM EXAMINATION. The body was well nourished. There were sprouting granulations in the wound, whilst the aperture in the bone was closed by osseous matter to a point that would but just admit a probe. The dura mater was healthy. An abscess, containing about twelve ounces of laudable pus, was found occupying the middle and posterior lobes of the right hemisphere. The lateral ventricle was empty, and not opened into; but its roof was depressed. The right hemisphere pressed against the left, but there were no adhesions; and the falx suffered pressure. The abscess appeared to possess a pyogenic membrane. Two pieces of wood (one measuring about an inch by an inch and a half, and the other an inch and one-eighth by five-eighths of an inch) were found imbedded in the cerebral substance at the posterior extremity of the abscess, behind the collection of pus. The thickness of the pieces of wood was that of a lozenge.

In the discussion that followed the reading of this paper, the rarity of osseous closure of apertures in the skull was commented upon.



Dr. MONCKTON once had a case of osseous closure. The aperture (compound fracture) was at the boundary betwixt the frontal and parietal bones. The aperture measured about an inch and a half by an inch.

Mr. J. M. BURTON narrated the case of a child five years old, who was struck on the head by the hoof of a horse. The skin was not wounded. Convulsions and insensibility occurred immediately. Mr. Burton's brother made a crucial incision, and raised depressed bone by means of an elevator. Consciousness was regained; the convulsions ceased; and recovery was perfect in six weeks.

Mr. FRY mentioned the case of a Merry Andrew who was injured by a sledge-hammer wielded by a woman in a brawl. The man lay for sixty hours perfectly unconscious, without coldness of skin, convulsions, or other bad symptom. He recovered instantly, whilst the surgeon was at the bedside. Doubtless, it was a case of prolonged stunning, with abrupt recovery.

Dr. ARMSTRONG mentioned a case in which a sailor, injured by a fall from the rigging, lay for two hours in an unconscious state, and then recovered abruptly.

Dr. F. J. BROWN remarked, that stunning and concussion might be different conditions; for under stunning there is no collapse, no alteration of pupil or of respiration—nothing abnormal, excepting the state of unconsciousness.

Dr. MONCKTON suggested that the abrupt recovery might be explained in the following manner. The state of stunning passes into *deep sleep*; and sudden waking then occurs.

#### SPONTANEOUS WITHDRAWAL OF THE ARM, AND CEPHALIC BIRTH, SUCCEEDING TO ARM-PRESENTATION.

By GEORGE HENRY FURBER, Esq.

[Read October 25th, 1864.]

On June 22nd, at eight o'clock in the evening, I was called to see Mrs. C., in labour with her eighth child. I found that the pains had commenced about three in the morning, and that the waters had escaped about twelve hours. She was, when I saw her, walking about, with frequent and active pains. On examination, I found an arm presenting, a considerable portion of the extremity having passed the os uteri; and, on a deeper exploration, the finger came into contact with the side of the head. On introducing my hand for the purpose of turning, I found the uterus so firmly contracted, that it would not allow of my doing so. I gave her at once forty drops of tincture of opium, and sent for another medical practitioner, who arrived within an hour.

Upon consulting, we came to the conclusion that, taking all the symptoms and state of the mother into consideration, we should be perfectly justified in waiting a short time longer, in hopes that possibly the labour might terminate even with such a state of things existing, or that the uterus might relax under the influence of the opium given. After a lapse of an hour and a half, the pains increasing, but without any power, another examination was made; and we found that no progress had taken place. The mother remaining still very comfortable, and free from exhaustion, we determined, prior to taking more active steps, upon awaiting the result of another hour. For this purpose, we both left our patient and went down stairs; but in less than ten minutes we were suddenly summoned by the nurse, when we found the head presenting; and, with one vigorous contraction of the uterus, the

child, full grown and alive, was brought into the world. The placenta followed quickly, and all was over by 11 p.m.

I ought, perhaps, to mention that I followed a midwife, she having had charge of the case some hours.

## Reviews and Notices.

A SYSTEM OF SURGERY, THEORETICAL AND PRACTICAL, IN TREATISES BY VARIOUS AUTHORS. Edited by T. HOLMES, M.A. Cantab., Assistant-Surgeon to St. George's Hospital and to the Hospital for Sick Children. In Four Volumes. Volume the Fourth. Pp. 1079. London: 1864.

THIS, the fourth and concluding volume of Mr. HOLMES'S *System of Surgery*, contains articles on the Diseases of the Organs of Digestion, of the Genito-urinary Organs, of the Breast, Thyroid Gland, and Skin; together with an Appendix of Miscellaneous Subjects, and a General Alphabetical Index and List of Authors.

The first article, on Surgical Diseases connected with the Teeth, and their Treatment, is contributed by Mr. S. J. A. SALTER. The points on which he writes are: 1. Alveolar Abscess; 2. Painful and Difficult Eruption of the Wisdom Teeth; 3. Tumours of the Gum and Tooth-pulp; *a*, epulis; *b*, congenital hypertrophy of the gum and alveolar borders of the maxilla; *c*, polypus of the gum; *d*, vascular tumours; *e*, polypus of the tooth-pulp; *f*, sensitive growth of pulp after fracture; 4. "Abscess" of the Antrum; 5. Denterogenous Cysts; 6. Alveolar and Maxillary Necrosis from, *a*, phosphorus fumes; *b*, eruptive fevers; 7. Hemorrhage after Extraction; 8. The Application of Obturators, etc., in Fissure of the Cleft Palate or Fistula of the Antrum.

The Congenital Hypertrophy of the gum and alveolar border referred to in the list is a very rare malformation, of which two instances only have come to Mr. Salter's knowledge. One of them he saw under the care of Mr. Pollock at St. George's Hospital; the other has been described by Gross in his *System of Surgery*. The two cases, Mr. Salter says, are singularly alike in all particulars.

Mr. Pollock's patient was a girl eight years old. Within five weeks after birth, she had six teeth; and the gums were full, thick, and puffy. They increased; and at two years of age were cauterised, and all the teeth which had appeared were removed. She had at birth an unusual quantity of hair on the head and limbs, and the same peculiarity was observed on her admission. The patient was epileptic. A large, pink, slightly corrugated mass protruded from the mouth; it was very dense, inelastic, insensitive, and appeared as if covered with skin. The protrusion was greater from the upper jaw than from the lower. The mass consisted of an expanded and prolonged development of the alveolar borders of the maxilla, with immense thickening of the fibrous tissue of the gum, and exuberant growth of the papillary surface. On examining some portions removed by operation, some of the temporary teeth were found completely enclosed in the thick fibrous mass, with the fangs imbedded in sockets, but the crowns free of bone, and each surrounded by a serous-like chamber, without communication with the surface. One superior central incisor was nearly an inch from the surface. The

fangs of the permanent teeth were developed in proportion to the age; but the crowns were still encased in the bony loculi. The epithelium of the papillary surface had changed into a very thick and hard epidermis; and the papillae, instead of being from one-seventy-fifth to one-thirty-fifth of an inch in length, were from one-sixth to one-fourth of an inch. When the epidermis was removed by maceration, the papillae stood up like the pile of plush or velvet, and could be brushed from side to side by the finger. The treatment followed in both the cases was, to remove from time to time portions of the projecting mass by means of scalpels and bone-nippers, until the alveolar borders were reduced within moderate limits.

Mr. Salter objects to the term "Abscess" of the Antrum. What is ordinarily thus designated is, he observes, "not the suppurative of inflamed parenchyma, but the occlusion in a cavity of the purulent secretion from the surface of a mucous membrane which lines the cavity." Referring to the anatomy of the antrum, he points out a variation in its size; which, he says, although described by Otto in 1830, is not mentioned in text-books on anatomy.

"The antrum may extend so as to be in immediate relation to all the teeth of the true maxilla from the canine to the dens sapientiae, or it may be contracted to such narrow limits as only to correspond with two or three of the central ones. . . . Occasionally a root or roots of the first molar tooth (rarely any other) extend into the cavity, free of any bony covering, and merely overlaid by the mucous membrane lining the sinus; more often, however, the palatine and external roots diverge so as to leave an interval, between which the more depending sulcus of the antrum is excavated." (Pp. 25-6.)

Dentigerous Cyst is a condition of which but few examples are recorded; and Mr. Salter gives a brief outline of the cases that have been described. The cyst consists of a serous or seriform collection in the maxillary bone, dependent on misplaced teeth. In one instance only, within Mr. Salter's knowledge, has the affection been connected with a temporary tooth. The symptoms consist of a general expansion of the jaw-bone at some particular spot, with disfigurement of the features and a sensation of weight and tension. Sometimes, if the impacted tooth press on another, there may be considerable pain and distress, and even some constitutional irritation. On pressure, the bony walls yield and return with a crackling sound, like the doubling of stiff parchment; and fluctuation can generally be felt through the thin bone at some part. An important diagnostic sign is the absence of some tooth or teeth which should have appeared. The diagnosis may be further confirmed by the introduction of an exploring needle or trocar; and, on laying the cavity open, the tooth may be felt by means of a probe. The treatment consists in evacuating the contents of the cyst and removing the tooth. The result has always been satisfactory.

The next article, on Diphtheria and Croup, is written by Dr. A. W. BARCLAY. We should have thought such a subject scarcely coming within the range of a general work; nevertheless, here we have it. Dr. Barclay speaks very cautiously regarding tracheotomy in both these diseases; he does not condemn it, but his observations show that he is not a very strong advocate for its performance.

Mr. GEORGE POLLOCK contributes a series of articles on Diseases of the Mouth and Alimentary

Canal. His list is, of course, a long one; and all the subjects are ably treated of; but we can afford space for special notice of one or two only.

In speaking of Cleft Palate, after referring to the anatomical peculiarities of this malformation, Mr. Pollock gives directions as to the feeding of infants thus affected. The child cannot suck, on account of not being able to form a vacuum with the tongue, the naso-buccal septum being wanting. Hence it must be fed artificially; but, for this purpose, breast-milk alone should be employed in the earlier weeks. This should be drawn from the nipple, and administered through a bottle having a smooth flat ivory pipe with a small orifice, through which, the position of the bottle being regulated by the hand, the milk may flow gently into the mouth. For several weeks, the child should be held almost upright during feeding, so as to allow the nourishment to flow downwards and backwards into the pharynx. After a time, a remarkable degree of facility in taking food, considering the defect, is acquired. As to means for supplying the defect, Mr. Pollock says that an artificial septum is desirable as soon as it can be adjusted. "The sooner one can be worn, the less defective will the articulation become, and the more readily will the education of the child be advanced." For the plate for the hard palate, Mr. Pollock prefers gold; silver is readily soiled, and vulcanite occupies space. The plates, however, must be renewed as the child grows; and hence the question of cost becomes an important one. An artificial soft palate, made of thin India-rubber sheeting, may be worn not only without inconvenience, but with much benefit. In a note, Mr. Pollock says:

"The author cannot allow the opportunity to pass without bearing testimony to the ingenuity and efficiency with which Mr. Sercombe, surgeon-dentist to St. Mary's Hospital, has adapted artificial palates to the mouths of children afflicted with very extensive clefts; with so much success has his practice been attended, that an ultimate operation for the complete closure of the palate becomes a matter of choice rather than one of absolute necessity, for the improvement of the voice, etc." (Pp. 93-4.)

Operation for the closure of cleft palate should not, in Mr. Pollock's opinion, be performed before puberty; and in the meantime an artificial palate should be worn. The surgeon requires all the aid that the patient can give him; yet the operation has been performed at an earlier period. Billroth (*Archiv für Klin. Chir.*) closed, by successive operations, a cleft extending from the lip to the uvula, before the age of twelve months.

In the operation for cleft of the soft palate, Mr. Pollock has modified the process for dividing the muscles, first proposed by Mr. Fergusson. The last named eminent surgeon divides the levator palati muscles on each side by cutting with a right-angled knife behind the curtain of the soft palate. To cut with the point of such a knife out of sight is a proceeding in which, Mr. Pollock observes, few surgeons unaccustomed to such an operation would feel at ease; and hence it has occurred to him to divide the levator palati *through the palate*.

"A suture is passed through one section of the soft palate at the root of the uvula, the ends secured together by a knot and held outside the mouth. A second suture is then passed through the opposite side at a corresponding point. One of the sutures,



now firmly holding one-half of the soft palate, is drawn gently forwards and to its opposite side, so that the section of the palate is well stretched towards the median line. A thin, narrow, sharp-pointed knife, fixed in a long handle, is then introduced into the palate, close to the hamular process, a little in front and to its inner side. This process can be distinctly felt in the substance of the soft palate, internal, and a very little posterior to the last molar tooth. Running the knife upwards and backwards, and somewhat inwards, the point may at last be seen in the gap, having passed through the entire thickness of the soft palate, and having cut, if not wholly, at any rate partially, through the tendon of the tensor palati; the knife should now lie above most of the fibres of the levator. If the handle of the knife be next raised, the point becomes depressed; and if the blade be drawn forward, while it is at the same time made to cut downwards, it travels through a considerable section of a circle on the posterior surface of the palate, and insures the division of the greater portion of the levator palati. As the knife-blade travels downwards, the tension of the palate gives way, and often the division of the muscle is felt to be suddenly effected; the ligature being no longer pulled on by it, though previous to division it will be felt sensibly and spasmodically contracting. As the knife is withdrawn through the wound, the division of the levator muscle should be thoroughly effected. . . . Should any resistance still be observed, the knife must be again introduced through the anterior wound, and the fibres a little more fully cut in a downward direction. . . . Though Mr. Fergusson recommends the division of the palato-pharyngeus muscles, the author has of late satisfactorily operated on several clefts of the soft palate, without having divided those muscles or touched them with the knife." (Pp. 96-7.)

Having described the operation for cleft of the soft palate, Mr. Pollock next speaks of the means of remedying fissure of the hard palate, by raising flaps from the bone on each side and bringing them together in the middle line. These flaps, he says, consist of all the soft tissues covering the latter—it being difficult, probably impossible, to separate the mucous membrane from the periosteum; and hence he believes that the operation described in 1863 by Professor Langenbeck, under the name of "the operation by muco-periosteal flaps", is identical with the mode of operating introduced many years ago by the late Mr. Avery.

As to the result of operation on the palate, Mr. Pollock has found the improvement marked and satisfactory; speech, previously indistinct and even unintelligible, being rendered easily comprehensible. Of course, as he observes, time is required for the patient to learn to form letter-sounds, the requisite organisation for which has not existed. "It becomes, in fact, a task to the patient to learn how to pronounce correctly and distinctly a new dialect." Attention to the teeth, which are often defective and irregular, is necessary as a final step.

In speaking of Stricture of the (Esophagus, Mr. Pollock adds his authority to the condemnation of attempts to pass a bougie through the obstruction. In the early stage, it may be desirable to discover by exploration the exact seat of the disease; but, after this, little if anything is to be gained, in the way of benefit, from such treatment. And even positive harm may be done; for, even in skilful hands, the mediastinum, the pleura, and the pericardium, have

been penetrated by the end of the instrument, and death has rapidly followed.

Intestinal Obstructions—excluding all forms of external hernia—are divided by Mr. Pollock into those which produce acute and rapidly fatal results unless promptly relieved, and those which act more slowly. In the first class are comprised: 1. Congenital strictures or malformations; 2. Foreign bodies in the intestine; 3. Twisting or dislocation of the bowel; 4. Loops, formed by false membrane, by diverticula, or by fimbriated processes or other portions of viscera; 5. Mesenteric pouches, the foramen of Winslow, or thickened peritoneal sheaths, the result of old herniæ; 6. Invagination. The more slowly acting processes are: 1. Constipation; 2. Inflamed and thickened intestine; 3. Chronic peritonitis (tubercular) and abscess; 4. Tumours pressing on the bowel; 5. Simple stricture from ulceration, etc.; 6. Cancer.

This division into acute and chronic is not, Mr. Pollock warns us, to be accepted as absolutely correct, but rather as a mere outline. It must not be taken as a fact, that acute symptoms never attend any of the causes of the obstruction mentioned in the second class; but, as a general rule, while the symptoms of the cases coming under the first division are urgent and acute, most of those in the second division are attended by symptoms which come on gradually.

Regarding the value of constipation as a symptom, Mr. Pollock enters a caution.

"Constipation, or entire stoppage of defecation, is not an absolutely requisite symptom to indicate fatal obstruction of the intestine; nor, in suspected organic obstruction, should we presume to say that the disease has yielded to our treatment, even though diarrheal action of the bowels comes on; it will probably last but for a short time, or the quantity of fluid passed will be small in proportion to the frequency of the motions. A relaxed state of the bowels in stricture is usually indicative of ulceration, and may occur, in old contracted stricture of the intestine, within a very short period of death." (P. 154.)

Mr. Pollock has attempted to give an estimate of the relative frequency of obstruction from the several causes mentioned at various periods of life; and concludes that, in order of frequency, they occur in the following order: in *youth*, internal strangulation by bands or diverticula; adhesion of coils of bowel to each other; intussusception; foreign bodies taken by the mouth; cancer (rarely, and hitherto in rectum only); in *middle age*, the causes are, twists of the large or small intestine; gall-stones, intestinal concretions, and foreign bodies; simple stricture; mesenteric hernia; internal strangulation by bands, etc.; peritonitis, often resulting in abscess; simple constipation; and cancer; in *old age*, the causes of obstruction are, cancer; thickened intestine from old reducible hernia; intussusception; simple stricture; and internal strangulation.

As regards the diagnosis of the cause of obstruction, Mr. Pollock shows this to be very difficult—except in the case of intussusception. No other cause of obstruction, he says, produces such perpetual desire to go to stool in the early part of the attack; nor, with such attempts, the passage of blood and mucus. These symptoms are, then, of high diagnostic value as regards intussusception; but, as to the diagnosis of obstruction from other causes, setting aside the

probability of any one of them derivable from the age of the patient, the matter is much more difficult. Some practical information on the subject is, however, given by Mr. Pollock; and we must refer our readers to his remarks.

In speaking of the treatment of intestinal obstruction, Mr. Pollock mentions a case which shows the necessity of caution; it was one of stricture of the rectum, in which the author himself, while passing his finger through the stricture, produced a rent in the anterior part of the rectum through the diseased (cancerous) mass; the feces escaped into the peritoneum, and death rapidly ensued.

Mr. Pollock describes the operations for the formation of artificial anus, as well as the proceeding for opening the peritoneal sac so as to explore its contents and set free the intestine from bands, etc. Here, again, he points out that the duration of constipation is not to be taken as the positive indication for operation; inasmuch as it may exist for some time, and be followed by recovery.

"But, in the more acute instances of strangulation, with vomiting, pain, and distension, complete constipation must be present to justify operative interference. In the more chronic instances of obstruction, no matter how great the distension of the intestines, so long as fecal ejections can be secured in ever so small a quantity, the means to encourage them must be persevered in. No immediate operative measures should be sanctioned." (P. 176.)

As to the conditions which indicate the performance of one or other of the operations abovementioned, Mr. Pollock observes that opening the peritoneum is justified by a sudden attack of pain, with ineffectual desire to open the bowels, and persistent vomiting; if there be little or no tenderness, complete constipation must have existed more than twenty-four hours.

The conditions demanding an opening in the lumbar region are, long continued and unyielding constipation, great abdominal distension, and commencing irritability of the stomach, or actual vomiting.

Having described the several operations—Littre's, Amussat's, and Callisen's—Mr. Pollock concludes his valuable practical series of articles, with directions for performing the operation of tapping.

Mr. HENRY SMITH contributes an article on Diseases of the Rectum; in which he treats of Hæmorrhoids, Prolapsus, Fistula, Ulcer, Stricture, Cancer, Polypus, Pruritus, and Neuralgia. In regard to all these subjects, the author brings into use, in an instructive manner, the practical knowledge which he is well known to possess regarding them.

The important subject of Hernia has been entrusted to Mr. BIRKETT, who treats of it under the following divisions: 1. Pathology and Treatment of Hernia in General; 2. Special Kinds of Hernia. The account given by the author of the causes, symptoms, diagnosis, and treatment, of hernia in general and of its various forms is thoroughly full and complete; but contains little that demands to be especially noticed. We may observe, however, that, *inter alia*, Mr. Birkett has with considerable care investigated the statistics of the occurrence of hernia, using for this purpose the records of the London Truss Society for 1860 and 1861. Among the observations thus made, are some which tend to correct commonly received notions, especially as to Crural

Hernia. Crural hernia is usually said to be most frequent in females, and to occur in them oftener than inguinal hernia. The first of these statements Mr. Birkett does not dispute; the second, he says, is not founded on facts. From the data abovementioned, he finds that inguinal hernia is nearly as frequent in females as femoral hernia. The tables of the London Truss Society for 1860-61 give the following result: Inguinal hernia—males, 7543; females, 699; femoral hernia—males, 306; females, 748. In a total of 1442 cases of hernia in females, the relative frequency of occurrence of the two forms at various periods of life was found to be as follows:

| Ages.                   | Inguinal. | Femoral. |
|-------------------------|-----------|----------|
| Birth to 10 years ..... | 146.....  | 1        |
| 11 to 20 „ .....        | 103.....  | 37       |
| 21 to 30 „ .....        | 153.....  | 180      |
| 31 to 43 „ .....        | 164.....  | 252      |
| 41 to 50 „ .....        | 76.....   | 158      |
| 51 to 60 „ .....        | 33.....   | 84       |
| 61 and upwards .....    | 19.....   | 36       |

From this table it appears, that inguinal hernia is much more common than femoral in females under twenty years of age; and that the largest number of cases of femoral hernia occur between the ages of 20 and 40. This is true both relatively and absolutely; for, on comparing the numbers with the female population, the proportions of cases of femoral hernia to a million females have been found to be, under 20 years, 77; between 20 and 40, 952; above 40, 901.

Mr. Birkett has collected twenty-five of the most recently received cases of Obturator Hernia; and these, he says, may be divided into two classes—those, the majority, in which the hernial tumour was not discovered during life; and those in which its presence was ascertained by examination. He refers to several of the recorded cases, and points out the practical lessons to be derived from them.

In speaking of the diagnosis of this form of hernia, the author first describes its signs when a tumour can be felt externally.

"After passing through the obturator canal, the hernia emerges upon the thigh below the horizontal ramus of the pubes, to the inner side of the capsule of the hip-joint; behind, and a little to the inner side of the femoral artery and vein; and to the outer side of the tendon of the adductor longus. The tumour is covered by the pectineus muscle. From crural hernia, therefore, it may be distinguished by observing the relative positions of the horizontal ramus of the pubes and of the femoral artery..... In obturator hernia, these structures are in front of the tumour; in crural hernia, they are behind it." (P. 333.)

But, when no tumour or fulness exist, and well marked indications of strangulation are present, the difficulty of diagnosis is necessarily very great; as is shewn by the numerous cases in which the hernia was not discovered till after death. In these circumstances, Mr. Birkett believes that sufficient evidence of the presence of obturator hernia to justify operation may be obtained—

"By pain during the development of the hernia; by pain at the commencement of the present attack; by pain of a peculiar character during the progress of the illness; by pain referred to the course of the cutaneous filaments of the obturator nerve and the plexus formed with it and the internal cutaneous and its distributions; by pain excited by certain definite movements of the hip-joint; by pain induced by local



pressure carefully applied; and by pain when an examination of the pelvic orifice of the obturator canal is made *per vaginam*." (P. 324.)

In the treatment, if a hernia be detected, an attempt may be made to reduce it by pressing it so as to free it from, and make it pass under, the ramus of the pubes. If it be determined to make an exploratory incision, this should be commenced a little above Poupart's ligament, midway between the spine of the pubes and the femoral artery, and should be carried down parallel with the artery or with the adductor longus muscle. The parts should be gradually cut through, and the hernia searched for carefully, until even the obturator muscles are separated, if necessary; "for it is not until the finger can be placed upon the outlet of the obturator canal, that the search for the hernia should be abandoned as hopeless." Whether, after making an exploration on one side and finding no hernia, the surgeon should repeat the process on the other side, is a question which Mr. Birkett leaves "to the judgment of those who may happen to be placed in such an unpleasant dilemma." But what, if a hernia be found and returned, and the symptoms persist? That such an occurrence may take place, is indirectly intimated by Mr. Birkett, who mentions that, in several instances in which the hernia was not detected during life, protrusion through *both* obturator canals was discovered after death.

[To be continued.]

## Progress of Medical Science.

### ANATOMY, PHYSIOLOGY, & PATHOLOGY.

**EMBOLISM OF THE RENAL ARTERIES.** At the Pathological Society, on December 6th, Dr. Hermann Weber exhibited kidneys with so-called fibrinous deposits from embolism of the renal arteries. The patient, a woman aged 26, had been admitted into the German Hospital on October 3rd, with old mitral disease and pulmonary apoplexy. On October 5th, she was suddenly seized with violent pain in the right side, just below the twelfth rib, with collapse, vomiting, and diarrhoea, the pain being increased by pressure. These symptoms abated after about two days. On October 12th, a similar but still more violent attack occurred, the pain being this time on the left side, lasting almost a week with varying intensity, and being only relieved by frequent subcutaneous injections of morphia. The urine, which had hitherto contained very little albumen, became highly albuminous during and for about a fortnight after this occurrence; it contained many tube-casts, principally transparent. From the end of October, however, until the time of death, the urine was free from albumen and casts. Traces of blood only had existed during a few days at the time of the attacks. Anasarca of the lower extremities, which had been moderate before the attacks, increased much immediately after them, but diminished again with the disappearance of the albumen from the urine. There was intense icterus during the last fortnight. Death occurred from pulmonary apoplexy and pleuritic effusion on November 11th.

The *post mortem* examination manifested narrowing of the mitral opening, it being oval, and the edges rough. There was great dilatation of the left auricle. The tricuspid orifice was moderately contracted (from adhesion between two of the folds, and slight thick-

ening of all three), and the right auricle dilated. The right lung exhibited the products of pulmonary apoplexy in various stages, and the right pleural cavity was filled with sero-purulent fluid. The mucous membrane of the small intestines was swollen, closing the opening of the gall-duct. The liver was nutmeg, with commencing atrophy, and the tissue very tense. The spleen was hard and tense; as also the suprarenal capsules. The right kidney contained in the centre a pale yellowish deposit shrunken and depressed below the surface of the surrounding tissue; the left kidney contained several larger deposits, likewise of pale yellow colour, but slightly raised above the level of the surrounding normal tissue. The deposits occupied the greater part of the upper portion of the kidney. The corresponding artery was obliterated by an old fibrinous plug; while the artery supplying the normal portion was free. The plug in the obstructed branch of the artery was slightly adherent to the walls; it could, however, be separated without injuring them. It did not obstruct the whole length of the branch, but terminated at two ramifications rather abruptly, leaving the remainder free.

Dr. Weber remarked, that the case showed the embolic nature of so-called fibrinous deposits of the kidney; that it further elucidated the symptoms of embolism of the kidneys, which affection, in this instance, had been diagnosed by Dr. Baumler, the resident physician of the hospital at the time of the occurrence; and that it manifested also the changes taking place in these "deposits"; that in the right kidney having occurred thirty-eight days before death, being already shrunk below the level of the surrounding tissue, while the "deposits" in the left kidney, having occurred between a week and a fortnight later, were still slightly prominent above the level of the surrounding tissues, but without the elevated red margin seen in still more recent cases. Dr. Weber mentioned, that Virchow had clearly proved, by experiment, that much larger pieces of fibrine than that forming the plug in the case before the Society, could be propelled by the heart, and carried by the blood to distant organs, until they were arrested by the diminished size of the artery, or by a bifurcation, leading thus to plugging of some arterial branch or branches.

**INFANTILE PARALYSIS.** M. J. V. Laborde says that the belief that the muscles in the paralysis of children always undergo fatty degeneration must be accepted with some restrictions. In a case in which paralysis had existed for two years, and was connected with a well marked morbid change in the spinal cord, he found the muscles merely atrophied, the fibres being pale and wasted. He has communicated to the Société de Biologie the results of a histological examination of muscles in the successive stages of the disease mentioned. The alterations are classed by him as follows. 1. In the first degree, there are evident traces of striation of the muscular fibres; but the striæ appear spaced out; the large intervals where they are absent are filled with opaque molecular granules, many of which also cover the remaining striated fibres. The granules are not removed by ether or alcohol; but are sensibly diminished in number by slightly diluted acetic acid. This condition is met with in muscles which have apparently undergone least change, and in which red fibres are still perceptible to the naked eye.

2. In a more advanced stage, no appreciable trace of striæ can be found; the longitudinal fibres, almost deprived of undulations, are seen; the granular element is always very abundant.

3. In the third degree, the striæ have completely disappeared, and the longitudinal fibres are more

rare, and in all cases are enveloped in a mass of granules. The interfascicular spaces are filled with serrated fibres of areolar tissue, with more scattered nuclei.

4. The fourth phase of the morbid process represents only as it were the skeleton of the muscular fasciculus, at most contains some outlines of longitudinal fibres. The granular condition predominates. The spaces between the fasciculi are enlarged; and the areolar tissue is increased in quantity.

5. In the last stage, not only the proper muscular tissue, but also the granular element, have disappeared. The empty transparent tubes of myolemma alone remain; some scattered granules are seen lying on their walls. These tubes are widely separated and surrounded by areolar and fibrous tissue mixed with some elastic fibres.

In the last two degrees, the muscles have entirely lost their normal appearance, and consist only of a kind of greyish fibrous-looking cord. (*Gaz. Méd. de Paris*, 12 Novembre, 1864.)

**EPITHELIUM OF THE PULMONARY VESICLES IN MAMMALIA.** In order to ascertain whether the pulmonary vesicles possess epithelium, Dr. Chrzonszczewsky of Casan has employed the following process. Having expanded fresh lungs by insufflation, he injected the vessels with gelatine and immediately immersed the preparation in a solution of nitrate of silver (.05 to .5 per cent.); and, having allowed it to remain there for eighteen to twenty-four hours, hardened it with alcohol. Sections of this, coloured with solution of carmine, were examined in glycerine slightly acidulated with acetic acid, or better with tartaric acid. Epithelial cells, of polygonal form, were distinctly seen lining continuously the base and the walls of the alveoli. The cells were very distinct, and their nuclei often had a deep brown colour. (*Wurzb. Med. Zeitschr. und Gaz. Méd. de Paris*, 15 Oct., 1864.)

**PATHOLOGY OF CONGENITAL SYPHILIS.** Dr. Förster of Würzburg founds the following propositions of an analysis of thirty-six *post mortem* examinations. 1. The presence of a deep-coloured eruption (papulæ, etc.) around the mouth or anus positively denotes congenital syphilis when the eruption has appeared in the first weeks after birth. 2. A croupal, diphtheritic, or ulcerous affection of the nasal fossæ in new-born children and nurslings, is a probable, but not certain sign; the probability of syphilis is greater if the disease of the nasal fossæ have appeared soon after birth. 3. Lobular indurations and inflammatory foci in the lungs, having a smooth, hard, grey or reddish yellow section, and presenting cheesy softening in the centre, denote congenital syphilis, unless the presence of miliary tubercles indicates tuberculosis. 4. The presence of gummata (*tubercules gommeux*) in the lungs of a fetus, new-born child, or nursing, must be regarded as an indubitable sign of syphilis. 5. Fissures at the angles of the lips, deep or superficial ulcerations on the lips or tongue, with sharply defined edges and a lardaceous aspect, are, if they have appeared at or soon after birth, probably due to congenital syphilis. 6. Gummata of the liver, fibrous degeneration of Peyer's glands, and subcutaneous patches of suppuration on the skin of new-born children, are certain indications of the disease. (*Wurzburg. Med. Zeitschr.*; and *Gaz. Méd. de Paris*, 15 Octobre 1864.)

**BACTERIA IN THE SECRETION OF BRONCHITIS AND CORYZA.** M. Pouchet, having several times observed that patients who had bronchitis or coryza, or otitis, were sometimes awakened by an insupportable itching in the affected part, was led to imagine that this

sensation might be analogous to the itching produced by ascarides, and be due to the presence of microscopic animalcules. Accordingly, on examining the sputa first expectorated by a patient with slight pulmonary catarrh, who had been awakened from a calm sleep by violent itching in the trachea, he found the secretion to contain an immense number of bacteria moving rapidly; some monads were also present. In half an hour afterwards, the expectoration, which was abundant, presented no trace of these organisms. A similar observation was made in a case of coryza; as well as in one of chronic otitis of the external ear. M. Pouchet says that the appearance of these animalcules—bacteria, monads, and vibrios—coincides with the rapid putrefactive changes undergone by the secretions of the mucous membranes and of some parts of the skin, under the influence of an elevated temperature and of retention on the surface of the membranes. (*Gaz. Méd. de Paris*, 19 Novembre, 1864.)

## SURGERY.

**RAPID OBSTRUCTION OF AN ARTERY BY CONTUSION.** A man, aged 24, was admitted into the Lariboisière Hospital under M. Cusco on August 17th, 1863. His left arm had been caught between the buffers of two railway carriages three hours previously. When admitted, he had on the upper part of the arm, at the inner edge of the biceps, a contused wound, involving apparently only the skin; and other cutaneous injuries were present on other parts of the limb. There had been but slight hæmorrhage, and it had been easily arrested. The humerus was not broken. The limb was cold; and sensation was somewhat blunted. There was no pulsation in the radial and ulnar arteries, nor in the brachial below the wound just mentioned; above this, it was distinct. The next day, warmth returned to the limb; but the arterial pulsations were still absent. The patient did well, with the exception of an attack of erysipelas in the end of the month, which retarded his recovery. On September 10th, the wounds were almost healed, and he left the hospital, complaining only of a little deadness in the fingers and muscular weakness in the arm. On October 16th, he felt rather weak in the arm, but was otherwise well. Only some feeble beats could be felt in the radial artery, evidently produced by the collateral circulation. M. Cusco believes that the obliteration of the vessel was produced by the rupture of the internal membranes and the formation of a clot above the seat of injury. He considers the case interesting, on account of the rapidity with which so large an artery as the brachial became obliterated under the influence of a violent contusion, of which the action was indirect only. (*Gaz. des Hôpitaux*, 4 Août, 1864.)

**WOUND OF THE SMALL INTESTINE: RECOVERY.** Dr. Pelizæus relates the following case. F. N., aged about 30, of good constitution and robust, was, on July 30th, 1863, wounded with a two-edged dagger in the abdomen during a quarrel; and was brought to Dr. Pelizæus about an hour and a half afterwards. On examination, there was found projecting in the left iliac region a reddish-brown convolution of intestine, of about the size of two hands; its vessels were bleeding vigorously and it was covered here and there with a whitish fluid. In this mass there were four wounds, two running obliquely and two transversely to the direction of the intestine, and varying from three-quarters to half an inch or less in length. The mucous membrane projected through all the wounds, and a whitish molerous fluid escaped from each;



showing that it was the upper part of the small intestine that was injured. The wounds in the bowel were united by sutures, which were cut off close to the knots. The protruded bowel was then replaced; and the wound in the abdominal wall was also united by sutures. Febrile symptoms set in in the evening; and the patient had full doses of morphia and applications of cold water. The next morning he was better; but, as there was some pain in the umbilical region, ten leeches were applied. Under the use of morphia and cold applications, the patient recovered so far that he was able to rise (although against advice) on the third day. On the fourth day some castor-oil was given. At the end of three weeks, recovery was perfect; there was only a little painless swelling between the umbilicus and ilium; and the functions of the intestines were quite normal. (*Archiv für Klin. Chir.*, 1864.)

In the same journal, Dr. F. Wysler relates a case of penetrating wound of the hypogastric region, attended with protrusion of the intestine, which was wounded in two places. In this case the wound was united by sutures. An abscess formed, which discharged pus through the wound; and for a time there were symptoms of purulent absorption. The patient, however, ultimately recovered; and was quite well at the end of two months.

**SPONTANEOUS EXPULSION OF CALCULI.** Dr. Von Thaden describes one hundred and eighty calculi, varying in size from a poppy-seed to a pea, as having been passed by a man in the course of seven months. The calculi, which were of rather firm consistence—a small fragment being reducible to powder by strong pressure with the finger—consisted of uric and phosphoric acids, lime, and magnesia. The patient, who had generally enjoyed good health, had first passed small calculi, without much difficulty, six years previously. Seven months before he was seen by Dr. Von Thaden, he began, without apparent cause, to pass the calculi now described; their passage was attended with violent desire to pass urine and much pain, which latterly had much diminished. The ordinary symptoms of calculus were wanting; but the painful desire to pass urine was but relieved by constantly lying on the back. The bladder was examined on three occasions, in one of which a firm body, apparently about as large as a walnut, was felt. The urine contained scarcely any blood, was acid, of specific gravity 108, deposited a little mucus, and contained epithelium from the bladder, but no crystals. Whether the pieces came from one or more calculi, Dr. Von Thaden could not determine. He observes that the spontaneous expulsion of calculi does not frequently occur; but refers to cases mentioned by Walther, Leroy d'Etiolles, Crosse, and other surgical writers. (*Archiv für Klin. Chir.*, 1864.)

**DIGITAL COMPRESSION IN ANEURISM.** M. Vanzetti of Padua has communicated to the Surgical Society of Paris the notes of seven cases of aneurism treated by digital compression during 1863 and 1864. The first case was that of a lady aged 28, who had an arterio-venous aneurism at the bend of the right arm, the result of a wound in bloodletting. The second case was one of arterial aneurism in a woman aged 63, also at the bend of the arm, and from the same cause. In the first of these cases, the cure was effected in six, and in the second in eight hours. In the third case, a man, aged 42, had popliteal aneurism, which had come on suddenly twenty-three days previously. A cure was effected in thirteen days, pressure having been applied to the femoral artery during 120 hours. During the treatment, pulsation in the aneurism returned on the twelfth day; but finally

ceased on the application of pressure for eight hours. The fourth case was one of arterio-venous aneurism, and the fifth of arterial aneurism, both at the bend of the arm, the results of wound made in venesection. A cure was effected in both; in the former in five hours; in the latter on the fifth day. In the sixth case, a man aged 40 had a large traumatic aneurism of the left axillary artery. M. Vanzetti applied compression to the subclavian artery for thirteen days, suspending it every eight or ten minutes; but at the end of this time, the artery having been compressed during ninety-five hours, the aneurism shewed no disposition to solidify; the pain returned, and the swelling became oedematous. M. Vanzetti therefore tied the subclavian artery at the point of its issue from the scaleni. This was done on July 27th, 1864, and the ligature came away on the twelfth day; the swelling had gradually diminished, but the aneurism remained fluid. On August 31st, there was still fluid in the tumour; but its size had diminished, and sensibility and motion, which had been impaired, were returning in the fingers. M. Vanzetti observes that there is still room for fear lest the aneurism should inflame and suppurate. In the seventh case, a man aged 42, had an aneurism of the right popliteal artery. Pressure was kept up during forty-eight hours on the femoral by the convalescent patients of the hospital, when perfect solidification was effected. In the cases of arterio-venous aneurism at the bend of the arm, M. Vanzetti has found it expedient to compress the vein near its connection with the tumour, so as to bring the latter nearer to the state of an ordinary aneurism, and thus render it more amenable to treatment by compression. (*Bull. Général de Thérap.*, 15 Octobre, 1864.)

**SUBPUBIC PUNCTURE OF THE BLADDER.** A commission, consisting of MM. Ségalas, Huguier, and Ricord, have reported to the Academy of Medicine on the operation of subpubic puncture of the bladder, proposed some time ago by M. Voillemier. (See *BRITISH MEDICAL JOURNAL*, vol. i, 1864, p. 95.) They say that, comparing this operation with other modes of puncturing the bladder, they do not hesitate to give it the preference; although they doubt whether the proceeding will come into general use until it has been proved, by a sufficient number of facts, that no mischief is produced by wounding the venous plexus which is traversed by the instrument. (*Gaz. Méd. de Paris*, 29 Octobre, 1864.)

## MIDWIFERY AND DISEASES OF WOMEN.

**EPIDEMIC ICTERUS OF PREGNANT FEMALES.** At the meeting of the Academy of Medicine in Paris on October 25th, M. Blot read a report on a memoir by M. Bardinot of Limoges, on epidemic icterus in pregnant females, and its influence in producing abortion and death. *A propos* of this memoir, M. Blot related a case of severe sporadic icterus which had occurred under his care in the accouchement clinique. It agreed with the descriptions given by M. Bardinot. A young woman, aged 20, had reached the middle of the fifth month of her first pregnancy. After a quarrel, she was seized with icterus, attended with extreme agitation, and loss of consciousness. Her movements were disordered; she uttered acute cries; and vomited, in abundance and with suddenness, a greenish watery fluid. The os uteri was completely dilated; the membranes were ruptured artificially; and a dead fœtus was removed. She now was in a state of somnolence, which was followed by extreme restlessness; the pulse became small and frequent; coma set in; and she died on the second day. At

the *post mortem* examination, numerous subcutaneous ecchymoses were found; the skin had an icteric tint. There was considerable vascularity of the cerebral meninges and of the cortical substance of the hemispheres. There were ecchymoses under the pericardium; the ventricles contained black diffuent blood. The lungs were in a state of hypostatic congestion. Beneath the peritoneum were seen ecchymotic patches, especially over the stomach and bladder. The kidneys were rather large, and coloured yellow. The liver was small, of a deep brown colour, and more firm than in the normal state. The biliary vessels were empty. Examined under the microscope, the tissue of the organ presented no appearance of hepatic cells; there were only abundant fat-globules mixed with biliary matter. M. Blot thinks that the peculiar severity of icterus in pregnancy is due to modifications produced by this process in the liver—consisting in hypertrophy and a more or less fatty condition. (*Gazette Méd. de Paris*, 29 Octobre, 1864.)

**PURGATIVES IN PUERPERAL FEVER.** Professor Breslau of Zurich states that, during three and a half years, he has seen 137 cases of puerperal fever among 485 lying-in women; of these, 30 died. Of the 137 cases, 81 were mild and 56 severe. He gives, after relating the histories of several cases, the following conclusions. 1. It is not prudent to wait more than twenty-four hours after the commencement of puerperal fever before administering a purgative—even when it is not certain whether the disease is puerperal or milk fever. The administration of the purgative, he says, can never do harm; while its omission may produce most grave results. 2. The purgative ought to be energetic; and the practitioner ought not to fear to repeat it twice, thrice, or often, according to circumstances. Dr. Breslau prefers infusion of senna with potassio-tartrate of soda. Sulphate of magnesia or of soda may also be used; or castor-oil, jalap, or calomel. Dr. Breslau usually does not repeat the same purgative, but varies the substances used. Not unfrequently the diarrhoea continues; the disease then takes a favourable turn. 3. Inflammation of the peritoneum, ovarian ducts, or Fallopian tubes ought not to deter us from the use of purgatives; they are to be regarded as the most powerful antiphlogistic remedy. Besides purgatives, other means may be employed according to circumstances; such as leeches, mercurial frictions, ice, cataplasms, etc.; but, when there is not intense peritonitis, these are useless. Purgatives alone can arrest commencing peritonitis. The author supports his views by the recital of twenty-seven cases. (*Archiv der Heilk.*, and *Gaz. Méd. de Paris*, 22 Octobre, 1864.)

**UTERO-INTERSTITIAL PREGNANCY AS A CAUSE OF DIFFICULT LABOUR.** At the Academy of Medicine on August 2nd, M. Parise of Lille read the history of a case, in which a female was delivered of a child, there being one already retained in an abnormal division of the uterus. No autopsy was made; but the diagnosis was verified by M. Depaul, who was called in consultation. M. Parise ended his memoir with the following conclusions. 1. A well formed fetus may be developed in the uterus and in the substance of its walls, so as to form an utero-Interstitial pregnancy. 2. This disposition may form an obstacle to natural labour, and constitutes a cause of dystocia, to be added to those—already too numerous—with which we are already acquainted. 3. It may retard the development of the uterine contractions, and prolong gestation beyond its natural term. 4. It may be diagnosed sufficiently early for the surgeon to be able to save not only the mother but also the child. 5. The following symptoms should lead to a suspicion of

the existence of utero-Interstitial pregnancy:—A large rounded tumour, occupying the base of the vagina, formed at the expense of one of the lips of the cervix uteri, and in the interior of which portions of a fetus can be felt; the os uteri being situated very high on one side the tumour, and embracing it in a crescentic form. 6. The tumour, with the exception of presenting hard fetal structures in its interior, may be taken for hypertrophy. 7. The most certain means of forming a diagnosis is to introduce the left hand, if the tumour lay on the left side, and *vice versa*; to glide the hand between the tumour and the fetus, high enough to ascertain that the whole of the fetus is contained in the uterus and that no part of it is lodged in the tumour. 8. The existence of an utero-Interstitial pregnancy having been recognised, the hand should be introduced, and the upper border of the partition which separates the two cavities seized with the ends of the fingers. A probe-pointed bistoury, fixed on a long handle, should then be introduced, and the partition should be incised from above downwards for a sufficient extent to allow the removal of the portion of fetus lodged in the pouch. This operation, performed sufficiently early, may save the life of both mother and child. (*Gazette Méd. de Paris*, 6 Août, 1864.)

**HERNIA OF AN OVARIAN CYST.** A young woman aged 17, was safely delivered nine months after marriage. Four months after her confinement, the catamenia had not returned. Subsequently, the patient began to feel general *malaise*, weakness of the lower limbs, headache, and occasional shooting pains in the left iliac region, with a sensation of weight. Five years afterwards, a tumour of the size of a walnut appeared in the fold of the left groin. On examination a few months later, M. Casati found, above the left crural region, a round fluctuating tumour, nearly as large as the head of a fetus at full term; and the whole of the left iliac region was occupied by a tumour at least twice as large as that found externally. The abdominal tumour presented fluctuation, and appeared to communicate with the other. The diagnosis made by M. Casati was, that there was an ovarian cyst protruding externally. He punctured the external tumour and injected iodine. A month afterwards, there was only a small tumour in the crural region, and the patient appeared to be cured. (*L'Ippocratico*; and *Gaz. Méd. de Paris*, 12 Nov., 1864.)

**CASE OF VICARIOUS MENSTRUATION.** M. Franceschi, in an essay on this subject, refers to the following case as being related in a Venetian medical journal. A woman aged 60, unmarried, subject to a certain degree of religious monomania, had for more than thirty years observed the following phenomena. The catamenia did not appear; but, instead of them, there was a discharge of blood from some part of the body, the precise time of appearance of which was predicted by the patient. Dr. Giachi saw one of these hæmorrhages. The blood came from the middle of the forehead; six ounces being discharged in an unbroken thread-like stream. The fluid was a pale rose colour and coagulable with difficulty. On another occasion, the hæmorrhage is reported to have come from the sternal region. There was no local disturbance; and the only appearance left was a small ecchymosis resembling a flea-bite. (*L'Ippocratico*; and *Gaz. Méd. de Paris*, 12 Nov., 1864.)

**OCCCLUSION OF THE VAGINA TREATED BY INCISIONS.** Margaret S., aged 27, was admitted into hospital on October 11th. Dr. Cronyn found her to be in the second stage of labour; but there was complete occlusion of the vagina, about half an inch from the vulva. A



year and a half previously, she had had a protracted labour, which was terminated by instruments; and she had been very ill and sore for some months afterwards. In consultation with Dr. Denham and Dr. Kirkpatrick, it was resolved to open a passage in the vagina—the labour-pains being very strong, and no impression being made on the occluding tissue. Accordingly, chloroform having been given, and a catheter introduced into the bladder, Dr. Denham carefully made an opening with a bistoury in the septum; and, on a director, made a incision forwards and backwards, and one to each side. The opening was then dilated with the finger. The liquor amni escaped with the first incision; and in three hours and a half afterwards a healthy female child was born. The patient went on well, and was discharged at her own request on the nineteenth day. The vagina was much contracted, as she would not submit to any treatment with the view of making the cure permanent. The case was reported before the Dublin Obstetrical Society; and, in relating it, Dr. Cronyn referred to a similar instance in the twelfth volume of the *Dublin Quarterly Journal*. (*Dublin Quart. Journ. of Med. Science*, November 1864.)

## British Medical Journal.

SATURDAY, DECEMBER 24TH, 1864.

### THE VENEREAL DISEASES COMMISSION.

It would be well that the profession knew somewhat better than they do at present, what are the exact objects of the Commission which has been appointed to inquire into the nature and treatment of venereal diseases—whether or not the Commission has any clear and definite purpose before it. We do not wish to be captious, and especially in the very rare case of a medical Commission appointed by Government; but, for the very reason that the Commission is a governmental one, it is desirable that it should, in its conclusions, respond to the expectations of the Government which appointed it. May we not, therefore, usefully inquire as to its prospects of success in this respect; and particularly so under the somewhat suspicious character of the initiation of the Commission? Unless we are much misinformed, the Commission was, at all events in part, initiated under the influence of what might be called enthusiastic ignorance. That is to say, the very last thing which had anything to do with calling it into existence was the voice of scientific inquiry. An enthusiastic gentleman, who holds views on the subject of syphilis such as are laughed at by every other member of the profession, by the very force of his own credulous convictions, so worked upon the non-professional ideas of navy and army authorities as to assist much in bringing the Commission to life. If this be true, the Commission is in some degree a homage paid by Government to ignorance, rather than to science. That which is the laughing-stock of the profession has operated seriously upon Govern-

ment, and has aided in producing an assemblage of scientific men to investigate and report on the nature and treatment of venereal diseases.

Good sometimes comes out of folly; and, in this case, good may result from the inquiry. But we may in the meantime fairly ask, Would any body of scientific medical men have ever proposed a Government Commission for such a purpose? Would the Medico-Chirurgical or any other scientific medical body, for example, have undertaken to respond to such queries? Surely, when we consider the origin of this Commission, we may fairly inquire, What good is it likely to effect? What are its chances of answering satisfactorily the question put to it? And what is the main thing required of it by those who appointed it? The Commission, no doubt, before accepting the responsibility of such an inquiry, has put to itself questions of this kind; has tried its own powers and capabilities:

“Quid ferre recusent,  
Quid valeant humeri.”

But as yet the profession have not been informed of the views of the Commissioners—of the ideas which they entertain of the nature of the work which they have taken in hand, and of the direction in which they think to carry it out. It would be a great misfortune if the Commission should eventually make a report which leaves the matter just where it found it. Indeed, if it have not a chance of giving the Government some useful practical information, it would assuredly have been better that it had never been called into existence.

Let us, therefore, in the absence of any authoritative information, inquire in what way such a Commission is likely to produce useful or positive results. What are the considerations which would naturally press themselves upon the mind of any body of scientific men, when called upon to decide as to the propriety of forming a Commission for such a purpose?

And, first, as regards the scientific side of the question, it is manifest, on the face of the thing, that to the army and navy authorities it must be a matter of profound indifference whether or not there be one, two, or half a dozen varieties or species of syphilitic virus; whether or not secondary and tertiary and syphilitic productions are inoculable; whether mercury be or be not the right remedy for the disease; etc. The question those gentlemen want answered is this, How shall the syphilitic diseases of our soldiers and sailors be prevented or diminished? Reports or dissertations on the nature of syphilis, summaries of the opinions of all the learned authorities on this side and the other, and the conclusions *pro* and *con*, unanimous and otherwise, of the Committee as to its treatment, will manifestly be no answer such as the Governmental authorities want.

A scientific dissertation on the nature and treat-

ment of venereal diseases, signed by all the highest authorities of the Faculty and all the venereal specialists in Europe, would be of no use to the army and navy authorities. What they want to know is, how to prevent the soldier and the sailor from catching venereal diseases; how to prevent the loss of these men's services to the country, which results therefrom. The Government knows well enough that when the man has once caught the disease, his services are for a given number of days or weeks inevitably lost, and will be lost despite of the most learned reports on the subject, and despite of the most skilful treatment of the disease. A soldier or a sailor affected with venereal disease, whatever the treatment employed, is necessarily useless to the service for a given number of days or weeks; and we, as scientific men, know right well before the Commission enters on its business, that nothing which it can do in the way referred to can prevent that result. The very most that it can hypothetically pretend to is, to recommend as preferable over others some one of the methods of treatment already in use—to diminish by a few days the period of a venereally diseased soldier's or sailor's life in hospital.

Now, we have already said in this JOURNAL, and we repeat, what seems to us the plain English of the matter—that if this Commission is to do any service whatever in the sense for which it has been appointed, its main and prominent object must be the consideration of the prophylactic treatment of venereal diseases, how to prevent the spread of them; how, in a word, to prevent soldiers and sailors from catching them. What would any one now-a-days think of a Commission which was appointed to inquire into the nature and treatment of fevers, and appointed, of course, for the purpose of diminishing those fevers in a country—what would be thought of such a Commission, if it did not, primarily and above all, lay down rules for its prophylactic treatment? Science is all powerful in preventing the rise of certain fevers; science is all feeble in their treatment. In a lesser degree, equally is this true of venereal diseases. If, therefore, this Commission be of use to the Government, it will be so, not by discussing questions which every scientific man must feel beforehand that it can never solve, but by recommending the Government some means of arresting the diseases at their very origin and source. *Principiis obsta* must be their motto, if they do the work wanted by the authorities.

We can well understand a learned society of scientific men undertaking an investigation into the actions of chloroform, and into the best remedy for the asphyxial state, and producing most useful conclusions. Such a society experiments and learns from facts; and its recorded deductions, being the results of the observations of a body of learned and capable men, naturally have weight with the world.

But what definite and satisfactory deductions can be expected at the hands of even the most scientific body of men who are engaged simply in collecting and collating a heap of opinions—opinions, let it be, of the most scientific authorities—and who from these opinions alone (modified or unmodified by their own preconceived views on the subject) arrive at conclusions concerning the nature and treatment of venereal diseases? Can we, *à priori*, expect much in this direction from the labours of a Commission constituted, even as this Commission is, of the most capable of men?

We had imagined that the old and respectable institution, a jury of matrons, had lapsed into obscurity. It still, however, seems alive, to mock the advance of scientific knowledge. A man and woman having been condemned to death at Norfolk,

“The prisoner Baker was asked if she had anything to urge in stay of execution. She stated that she was in a state of pregnancy; whereupon a jury of matrons were impanelled and sworn to try whether she were pregnant or not. The jury of matrons, having examined the prisoner Baker last night, found that she was pregnant. His lordship thereupon respited execution of the sentence until the delivery of her child or Her Majesty's pleasure be known.”

If we remember right, it was not many years ago that a woman under sentence of death, who had been declared by a jury of matrons *not enceinte*, was nevertheless found to be so by the medical officer of the prisoner. We need not, to our professional brethren, discuss the patent absurdity of such a practice as allowing matrons to decide the question.

THE French Academy of Medicine, on the 13th inst., at its annual meeting, decreed the prizes for the year 1864. To Dr. Desguin, an army surgeon, was given 600 francs, the Academy's prize, for his answer to the question, “The clinical study of the Nervous Complications arising in the course of Acute Rheumatism”; and to MM. Ollivier and Ranvier 400 francs, for their theses on the same subject. Baron Portal's prize found no taker, on the question, “To determine the state of the Nerves in Local Paralysis”. The subject of Madame de Civrieux's prize was, “The history of Progressive Locomotive Ataxy”; Dr. Topinard received therefrom 600 francs, and Dr. Bach 400 francs. Baron Barbier's prize on apparently impossible subjects; viz., The discovery of radical cures for cancer, epilepsy, typhus, and so forth, was not accorded; seven claimants, however, competed for the 4000 francs. Dr. Itard's prize of 3000 francs for the best work or paper on Medicine and Therapeutics was accorded as follows: 2000 francs to Dr. Davaine for his treatise on Entozoa; 1000 francs to Dr. Bonnafort for his treatise on Diseases of the Ear; and honourable mention of the names of Dr. Latour for his work on Animal Heat as the Principle



of Inflammation, etc."; and of M. Bonjean, *pharmacien*, of Savoy, for his treatise on Ergot of Rye. Dr. Capuron's prize of 1000 *francs* goes to Dr. Poreau, for his paper on Incoercible Vomiting during Pregnancy; and honourable mention is made of the names of two other physicians. Orfila's prize of 6000 *francs* on the subject of Poisonous Mushrooms, being indivisible, goes to M. Bondier, a *pharmacien*. of Montmorency; honourable mention is made of the names of Drs. Reveil and Cordier. Dr. Godard's prize of 1000 *francs*, for the best work on Internal Pathology, goes to Dr. Legros. Besides these, prizes of money, and gold, silver, and bronze medals, and honourable mention, were accorded to numerous medical men, for the services performed by them in the matters of vaccine and of epidemics during 1863.

THE following are the prizes proposed for 1865 by the French Academy of Medicine. The subject of the Academy's prize of 1000 *francs* is Traumatic Paralysis. For Baron Portal's prize of 1000 *francs*, is proposed the question, "Does Cancer present any Specific Anatomical Characters?" For Madame Civrieux's prize of 1000 *francs* is proposed, "The Relations between General Paralysis and Madness." 'The state of the Pulse in the Puerperal State' is the subject of Dr. Capuron's 1000 *francs* prize. Baron Barbier's prize of 8000 *francs* is too large a prize to be taken; it is for him who shall find a cure for the (as recognised) most incurable diseases; viz., hydrophobia, cancer, epilepsy, scrofula, typhus, and such like. By the way, how is it that the endless tribe of advertising quacks, who yearly discover infallible remedies for these sort of diseases, do not put in their claims to the Academy? 8000 *francs* are not to be despised, even by a well-to-do empiric. We may also add that, if any of our own legitimate brethren (as sometimes it happens) thinks to have made a great discovery—for example, to have completely routed small pox by sarracenia; put an end to epilepsy by cotyledon umbilicus; fever by quinine; and so on *ad infinitum*—he should test the value of his invention by the light of M. Barbier's 8000 *francs*. This prize, adjudged by the Academy, will be a very satisfactory certificate. Dr. Amussat gives 2000 *francs* for the best surgical cure or remedy. Dr. Godard gives 1000 *francs* for the best essay on Surgery. For the year 1866, the Academy offers the following prizes and questions. Epidemic Erysipelas, 1000 *francs*; Headache, 800 *francs*; Shivering in the Puerperal State, 1000 *francs*; Digitaline and Digitalis, 2000 *francs*; Melancholia, 1500 *francs*. The essays for the prizes to be adjudged in 1865, must be sent to the Academy before March 1st, 1865, written in French or Latin.

As Government Commissions in a medical direction seem creeping into fashion, we would suggest, as well

worthy the attention of such a learned fraternity, the subject of vaccination direct from the cow, as now practised at Naples. Here, at all events, is an actual fact capable of being distinctly dealt with; and a fact which may bear results of infinite service to the whole of our community. Dr. Palasciano read a paper on the subject at Lyons; and said that at Naples for twenty years and upwards cows were kept for the purpose of affording supplies of vaccine; that vaccine was supplied direct from the cow to the party vaccinated; that the children of the late King of Naples were thus vaccinated; that all those who could afford to pay the few shillings required for the luxury were at this day so vaccinated; and that the system was spreading through Italy—the united. Could any question be more worthy of serious inquiry? If all that is said of this mode of vaccination be true, it ought to become the universal practice. No doubt, vaccination in ninety-nine cases out of a hundred is an innocent operation; but to this day we have not the proof, that the seeds of a constitutional disease may not be transmitted with the vaccine from infant to infant. We know that, in the case of syphilitic disease, it has been so transmitted; we know that there is a very wide spread belief amongst mothers, that their children are apt to fall ill one way or other after vaccination; and every medical man must have observed the occurrence of eruptions, etc., in children after vaccination who had been previously perfectly free from disease. The very possibility of the occurrence of such a transmission per vaccine matter (pure or impure), should induce us to take serious cognisance of such a fact as that brought to our notice by Dr. Palasciano. This mode of anticipating the evils of small pox is, in our opinion, quite as worthy of consideration as is that other great evil, synonymous in name, which now occupies a Royal Commission's attention. M. Diday thus announces the fact.

"A grand fact in medicine has just been produced. The vaccination of animals, often previously attempted in France, but universally abandoned, has been successfully practised under our eyes in a way which assures us of its future success. Vaccine fluid taken from a cow has been inoculated in another cow, and at the same time in three children, and all the inoculations have succeeded."

A LATE meeting of the French Academy of Medicine was almost wholly occupied with the reading of a report by M. Blache on a paper of M. Barthez, on the Expectant Treatment of Pneumonia in Children.

"There are", says the French critic, "enlightened men who have the courage openly and boldly to advocate the principle of an expectant treatment generally in diseases. In their view, the duty of the medical man should be limited to watching over the natural progress of the disease; his art should not blindly and inopportunistically interfere with nature. He should be contented with placing his patient in the most perfect hygienic conditions; and having done this, should leave him in the hands of a curative nature. They regard with sorrow those busy practi-

tioners, who are as busy as flies, and who never leave their patients a moment's repose, incessantly tormenting both them and themselves; for ever giving orders, prescribing, bleeding, purging, etc.; in fact, men who are just like a corporal exercising recruits."

The paper of M. Barthez is founded on the observation of 212 cases of pure pneumonia observed during seven years at Hôpital Ste. Eugénie, in children of from 2 to 15 years of age. Two only of these 212 cases were fatal; and they were both cases of double pneumonia. In nearly one-half of these cases, scarcely any medicinal treatment was employed; in a large number, it was insignificant; and in about one-sixth of the whole, it may be called active. The duration of the pneumonia was between ten and fifteen days when the disease was left to itself. Under the expectant method, the convalescence occurred in from five to ten days; but was prolonged under treatment. M. Barthez concludes, with M. Legendre, that pure pneumonia in children habitually terminates favourably.

Dr. M. DUNCAN details in the *Edinburgh Monthly Journal* statistics touching the Weight and Length of the Newly-Born Child in Relation to the Mother's Age. From his careful investigations, he concludes that "a study of the weights and lengths of newly-born mature children tends to support to the doctrine that the vigour of the female reproductive system waxes till the age of about 25 years is reached, and then wanes."

THE Commission appointed by the Academy of Medicine, to inquire into a method of cure of deaf-dumbness proposed by Mr. Turnbull, has refused further to entertain the subject, Mr. Turnbull having refused to explain his method of cure.

M. Velpeau has placed at the disposal of Professor Remak of Berlin a certain number of patients, on whom to exhibit the effects, therapeutical and galvanic, of the constant galvanic current in cases of nervous affections. M. Remak has brought to La Charité the apparatus which he has long used for the purpose. The Academy of Sciences has appointed MM. Rayer, Bernard, and Velpeau, and also M. Becquerel, a *physicien*, as a committee to assist at his experiments.

M. Pétrequin of Lyons recommends the application of tincture of iodine to cut surfaces as a means of promoting union by the first intention. M. Velpeau thereon suggests that the good effects are probably rather due to the alcohol in the tincture than to the iodine.

Dr. Giuseppe Severini tells us how to vaccinate homœopathically. He assures us that, if to a child be administered cow-pox diluted to the thirtieth degree, the desired effect never fails.

## THE LATE WILLIAM SENHOUSE KIRKES, M.D.

WILLIAM SENHOUSE KIRKES was born in the year 1823, at Holker, near Cartmel, Lancashire. His education was commenced at the grammar-school at Cartmel; but at an early age he was placed under the care of Messrs. Smith and Harrison, and of Mr. Langshaw, surgeons, in Lancaster, with whom he remained five years.

In 1841, he entered the Medical School of St. Bartholomew's; and the memory is not yet lost of his industry, talent, and blameless life. In the school examinations, he was in 1842 first in Chemistry, in 1843 first in Surgery, in 1844 first in Medicine, Midwifery, Medical Jurisprudence, and Clinical Medicine, and obtained also the collegiate prize. In 1846, he took the degree of M.D. at Berlin; in 1850, he became Licentiate, and in 1855, Fellow of the Royal College of Physicians. In 1856, he was Gulstonian lecturer. In 1848, he was appointed Medical Registrar and Demonstrator of Morbid Anatomy to the Hospital; and in 1854, after a close contest, Assistant-Physician; becoming full Physician in 1864, on the retirement of Dr. Burrows. He was also successively lecturer in the Medical School on Botany, and joint lecturer on Medicine.

The well known *Handbook on Physiology* was first published in 1848, in conjunction with Mr. Paget; the last three editions—viz., the third, fourth, and fifth—appearing in his own name only. He was also the author of numerous papers in the medical journals, some of them of no small value, and of an essay on Embolism in the *Medico-Chirurgical Transactions* for 1852. This, the first English essay on the subject, was founded on researches of his own, the originality of which was in nowise impaired by the publication but a short time before of some papers by Virchow containing similar views. He was an active member of both the Pathological and the Royal Medical and Chirurgical Societies; and, at the time of his death, was on the Committee recently appointed by Government to investigate the subject of syphilis. He had also been for some years indefatigable in collecting materials for a work on diseases of the heart. He died on December 8th, 1864, of double pleuropneumonia with pericarditis, after an illness of only five days.

Such is the brief outline of a life whose work might well have been spread over twice the number of years allotted to him. His success, the full fruits of which he was not allowed to reap, was owing to himself alone. His own merits, the good work he had done, the capacity he had shown, placed him on the staff of St. Bartholomew's Hospital in spite of powerful interest and of all but unbroken custom. Accurate in diagnosis, skilful in treatment, a worthy successor of the great men whose names adorn the roll of St. Bartholomew's Hospital, kind to his patients, ever ready to teach, a prudent and faithful adviser, gentle in act and word, he was yet himself unconscious of



the varied excellence of his own character. His loss will be felt widely beyond the circle of his own medical school, though most deeply there, for his finished work is but the earnest of what was with just confidence expected from him in the future; and though that work may be continued by others, his friends have sustained a loss which time can never perfectly repair.

## Association Intelligence.

### WEST SOMERSET BRANCH.

A QUARTERLY meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Wednesday, January 11th, 1865, at 7 P.M.

Notice of papers or cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D.,  
Honorary Secretary.

Taunton, December 10th, 1864.

## Reports of Societies.

### LIVERPOOL MEDICAL INSTITUTION.

DECEMBER 1ST, 1864.

HENRY LOWNDES, Esq., Vice-President, in the Chair.

*Renal Calculi.* Dr. GEE showed a specimen of a kidney containing two large renal calculi.

Mr. HIGGINSON and Dr. SHEARER offered some remarks on the case.

*On Chorea, and on Nature and Art in the Treatment.* By J. TURNBULL, M.D. Having pointed out the connection between chorea and rheumatism, and the relation in which it stands to epilepsy and hysteria and some other nervous affections, he stated that chorea might not only be a trifling disorder, but also a very severe, obstinate, and even fatal disease. It had been said that, because cases had been treated by diet and regimen only, and had recovered, the disease might very well be left to itself, and placed in the same category as many other disorders which tend to a spontaneous cure. He observed, however, that there is the same tendency to spontaneous cure in all curable diseases; and that this principle applies quite as much to serious acute diseases as to nervous disorders such as chorea and hooping-cough; and that it might be as well or better illustrated in regard to such acute diseases as pneumonia, the exanthematous fevers, and ague. He advocated therapeutic inquiry; but, in recommending sulphate of aniline as a remedy for chorea, he had done so with a full knowledge of the tendency to spontaneous cure, and had exhibited it as a gentle sedative in doses of two or three grains. It had been given in large increasing doses, as if intended to act as an antidote against the disease, as sulphate of zinc has been given; and a series of unsuccessful cases, in which it had been thus tried, had been published. He had, however, so often seen it prove useful, that he would still advise a trial of it in cases which resisted ordinary treatment, such as by the employment of the mineral tonics. He showed that the effects of aniline and of nitro-benzine had been confounded together, though in reality essentially different. He pointed out that nitro-benzine is one of the xyloids, a series of substitution compounds, all containing nitrogen,

and formed by the action of nitric acid on certain organic compounds, and all of them narcotic and more or less highly poisonous, as had been originally made known by Dr. Edwards. In the treatment of ordinary cases of chorea, he considered the metallic tonics the remedies most generally useful—the preparations of iron, arsenic, and zinc. Purgatives were required where there was any source of irritation in the bowels; and the shower-bath he had often found to be a remedial agent of great value and power. Cod-liver oil often assisted by its influence in improving the nutritive functions. On the other hand, there were some agents which appeared to have an injurious effect. Opium and morphia had appeared to be hurtful; and, though it had been said that the inhalation of chloroform proved useful, in his own experience it had rather seemed to have acted injuriously.

Mr. A. B. STEELE, Dr. SHEARER, Dr. VOSE, and Dr. FINIGAN, took part in the discussion.

Dr. TURNBULL, in replying to the remarks that had been made, said that he did not advocate specific treatment in these cases, but thought that each should be treated on general principles. In some obstinate cases, he had found the sulphate of aniline particularly useful as a remedial agent.

### WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, DECEMBER 3RD, 1864.

GEORGE D. POLLOCK, Esq., President, in the Chair.

*Bony Ankylosis.* By B. E. BRODHURST, Esq., F.R.C.S. The author said these cases were rare. When of the hip-joint, the patient is very helpless, and can only move by the aid of crutches. He is less helpless when the disease affects any other than the hip-joint. The propriety of interfering with bony ankylosis of the knee or ankle joint may be questioned; but, in the case of the hip and elbow joint, it must be of great importance to give the patient a chance of renewal of motion even where it would seem to have been hopelessly lost. In operating, it is important to divide the bone as near as possible to the articulation. In the elbow, a wedge-shaped piece may be taken from the centre of the articulation; and in the hip, the neck of the femur may be divided just below the head of the bone. The divided ends may then be scooped out, so that both surfaces shall be concave and facing each other; for the difficulty is to retain a false joint. So strong is the tendency for bony union to occur, a swinging limb need not be feared. If the action of the muscles cannot be gained, union by bone is certain to take place. It is important, therefore, to divide the bone in the most favourable position for the action of the muscles; and that point must be the nearest possible point to the articulation itself. In these cases, we have to deal with tolerably healthy structures; and hence it is that the tendency to repair is so strong. The muscles, too, which formerly moved the limb, are somewhat altered in structure; and, through disease, they will have lost power. It will require, therefore, for a lengthened period, both patience and fortitude to gain fair muscular power, after bony ankylosis has once become fully established.

CASE. A. M., aged 23 years, suffered from bony ankylosis of the left hip. When she was ten years old, she met with an accident, through which inflammation was excited. She continued to walk, however; no attention being paid to the limb for many months. She limped; the limb swelled; an abscess formed, and continued more or less to discharge pus and necrosed bone for ten years. Pain and abscess

at length ceased, and the limb became motionless. The author first saw the patient in 1862. She was in fair health. The question was, Could motion be given? Ankylosis had taken place, without dislocation of the head of the femur occurring. The neck of the bone was in part absorbed. The limb was shortened one inch and a half, to which the obliquity of the pelvis added two inches. She had for the previous year walked with crutches, and worn a boot raised four inches in the sole. The case appeared favourable for the operation, which was thus performed. An incision three inches long was made over the head of the femur to the outer side of the great trochanter, from which one another incision extended inwards. The neck of the bone was divided, and the ends gouged out. The flesh-wound healed almost by first intention; movement of the limb was attempted when the cicatrix was formed. The great difficulty now occurred. Motion was extremely painful, and, without chloroform, was apparently impossible. Movement was persevered in; and at length the limb readily moved, and some voluntary motion returned, so that she could extend the limb at a right angle. After six months, she could rotate the limb outwards, and sit down with ease. The pelvic obliquity was easily removed, the horizontal position being in itself almost sufficient. The foot was consequently brought much nearer to the ground; a steel support, with joints opposite the hip, knee, and ankle, was fitted to the limb; and the buttock supported by a leather shield. The operation has now been done two years. There is no lack of firmness about the joint, which requires constant exercise to keep it free; and she now walks with a stick, and without instrumental support.

#### HARVEIAN SOCIETY OF LONDON.

THURSDAY, NOVEMBER 17TH, 1864.

WM. ADAMS, Esq., President, in the Chair.

*Lesions Caused by Excessive Smoking.* DR. DRYSDALE observed that in a recent visit to Paris in August, he had been asked by Dr. Fournier, at present engaged in writing an article on the effects of tobacco smoking for the new Dictionary of Medicine, what lesions were attributed to excessive smoking by London physicians. He had replied that opinions varied greatly in this country; one physician of note as a pharmacologist asserting that no pathological states are caused by the habit; whilst another physician of great eminence stated that these well marked diseases were produced by excessive smoking, namely, palpitation of the heart, prolapse of the rectum, and impotence. Dr. Drysdale thought that tobacco smoking certainly tended, if not counteracted by other hygienic habits and a tough constitution, to produce several very disagreeable symptoms. He had recently remarked cases of jaundice in healthy young men, evidently produced by great smoking, such as three-quarters of an ounce to an ounce of tobacco a day. He had also under his care a young man with distressing palpitation of the heart, which the patient dated from his habit of smoking half an ounce of tobacco a day. Profuse smoking, he believed, tended to lower all the appetites, whether for exercise, food, or sex; in other words, to lower vitality.

MR. CURGENVEN observed that dyspepsia and palpitation of the heart were among the most common consequences of excessive smoking. A gentleman from Havannah, a patient of his, an excessive smoker, who never had a cigar out of his mouth, had one day an attack of syncope, which he had attributed to smoking many cigars on an empty stomach. He was

advised to take an early lunch and coffee after dinner. A medical friend of his had suffered greatly from nervousness and great dyspepsia, owing to excessive smoking. He left off the habit and recovered.

MR. WEEDEN COOKE observed that tobacco smoking affected different persons very differently. Smoking had its beneficial, as well as its deleterious effects. It certainly subdued sexual feeling; and parents, he thought, need not find too much fault with their sons for smoking, as it often kept their desires more under control. He thought, however, that a woman was quite right to insist that her future partner should not smoke much. Many gentlemen from thirty to thirty-five came to him, complaining of impotence; and he had generally found them to be profuse smokers. Literary men were sometimes benefited by smoking, since the brain-irritation prevented their eating, and smoking might prove a sedative. In fine, he supposed tobacco, like opium, was a useful drug in some cases; but, like opium, liable to do injury when taken in excess.

THE PRESIDENT said excessive smoking caused nervous diseases, conjoined with dyspepsia and deranged liver. One cigar would often be serviceable, as a promoter of peristaltic motion, whilst many would produce derangement of the intestines. Dilated pupil and amaurosis were caused, he believed, by great smoking; and in a case he had lately sent to an eminent oculist, the ophthalmoscope had shown that gentleman that the disease was caused by the habit.

DR. ROYSTON mentioned the case of a ship-chandler in Liverpool, an excessive smoker, who had acute inflammation of the liver after an excessive bout of smoking; also the case of a clerk on the Great Western Railway, who never had a pipe out of his mouth, and who had fallen into a fit of intense prostration and died. Dr. Royston believed, in consequence of his profuse indulgence in smoking. No *post mortem* lesions were found.

MR. JAKIN related the case of a gentleman, a great smoker, whose health was good until he suddenly left off the habit of smoking. He then became seriously ill; his pulse fell to 40, and on recommencing the habit he recovered his health.

MR. TIMES observed that excessive smoking had bad effects on the brain. A young gentleman, a great smoker, had been rejected three times at an examination which his brothers had easily passed. He had frequently seen similar cases of impairment of intellect caused by excessive smoking.

*Effects of the Climate of Tasmania on the Children of the Colonists.* MR. CURGENVEN asked if any member could give information as to the effect of Australian climates on the settlers and their offspring. In Tasmania he had heard that the climate was injurious to children. The heat of the day was excessive; the nights very chilly. He believed epilepsy was common among children. The female children grew tall and thin, and their teeth decayed soon; also the white part at the root of the nail disappeared.

MR. JAKIN said that the tallness of young females was very marked, and that they were called "cornstalks" for their slenderness. There was large infant mortality in Australia, and much insanity prevailed; also tendency to rheumatism, and absence of chest-complaints.

THE PRESIDENT had heard that adults thrived well with Australia, while children did not. He was acquainted with an Australian family, where the girls were certainly all very tall, and answered the description given by Mr. Curgenven.

*Some Notes on Menstrual Access, and Remedies for the Suppression and Evolution of Menses.* THE PRESIDENT mentioned a case of diseased knee-joint which had come on after the patient had caught cold, and



had suppression of milk in consequence. The knee became ankylosed, and he did not know to what category of affections to refer the case whether pyæmia or rheumatism. He had broken down the ankylosis under chloroform successfully.

Dr. ROYSTON had rarely in his practice any cases of mammary abscess, and this he attributed to his advice to the mothers to place the child to the breast as soon as possible after birth. The best remedy for suppression of milk he had found to be a lotion of camphor dissolved in spirits of wine, applied to the breast.

Dr. GRAILY HEWITT observed that, for the prevention of sore-nipples, it was very advisable to inquire into the condition of the nipple before parturition. If necessary, they ought to be elevated by gentle sucking for some days before delivery; also, tender nipples might be bathed in a decoction of oak-bark. After labour, the infant should be applied to the breast as soon as possible, in order as soon as possible to accustom it to suckle. He had found the best lotion for sore nipples to be a solution of nitrate of silver, in which case the child should suckle through a nipple shield. Sore nipples and mammary abscess were closely connected; in apparent abscess sometimes there was no pus, but only milk, even where the skin was red. In such cases the breast should be rubbed and gently pressed; this would often cure the apparent abscess. Treatment of chronic mammary abscess required simply attention to the general health in some cases for its cure. A lady-patient had suffered recently from this painful complaint. She was placed by Dr. Graily Hewitt on a diet containing a bottle of champagne every day, with some brandy, and was able to get about in a week.

Dr. BALLARD said that his experience had taught him that the welfare of both mother and child were best secured by delaying the application of the infant to the breast for a few days after delivery. The natives of India had this custom, and it was natural to suppose that they had found it beneficial. If the infant were put to the breast before the third day, it would generally be found to suffer from green motions and diarrhæa; and the mother would be liable to after-pains, and to many diseases of the puerperal state. Large breasts in women were no proof of large secretion of milk; the only proof was the condition of the nursling. He was convinced that the common practice of early putting the child to the breast was opposed to sound physiology.

Mr. JAKIN believed one of the best means of suppressing milk was lotion of belladonna, with salines; and for promoting the flow he had heard that the leaf of the castor-oil plant was a good remedy.

Mr. WEEDEN COOKE believed that, in chronic mammary abscess of either breast, we must abandon suckling in both, or the bad breast would not heal. Pressure by diachylon plaster strips was a good means of suppressing milk. In many cases of mammary abscess cold lotions are more useful than hot.

Dr. GRAILY HEWITT corroborated Mr. Cooke's assertion that it was necessary to avoid suckling with the healthy breast, in order to allow the one with abscess in it to heal.

Mr. SEDGWICK thought the custom of the Indian women ought not to be cited in favour of any practice of suckling, since he had seen the results of their customs, which were by no means agreeable. They are accustomed to suckle their infants for three years, in order to keep back the next pregnancy, and in consequence their breasts became large and pendulous, reaching down nearly to the navel.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 22ND, 1864.

R. PARTRIDGE, Esq., F.R.S., President, in the Chair.

ON VASCULAR PROTRUSION OF THE EYEBALL; BEING A SECOND SERIES OF THREE CASES AND TWO POST MORTEM EXAMINATIONS OF SO-CALLED ANEURISM BY ANASTOMOSIS OF THE ORBIT; WITH SOME OBSERVATIONS ON THE AFFECTION.

BY THOMAS NUNNELEY, F.R.C.S.

THE author began by referring to the first series of four cases of this uncommon affection published in the forty-second volume of the Society's *Transactions*; and suggested that, as these cases (like the three which formed the subject of the present communication, and especially the results of the *post mortem* examinations of the two patients who died long subsequently to deligation of the carotid artery, the particulars of which he was about to relate) proved the opinion so long entertained of the nature of the affection—aneurism by anastomosis of the orbit—to be incorrect, the name of it should be altered; and he suggested that of "vascular protrusion of the eyeball," as more in accordance with its true character.

The first of this second series of cases was of traumatic origin; it occurred in a man who was thrown from his horse. There were very decided symptoms of fracture of the base of the skull. In a few days after the accident the left eyeball began to protrude, and to exhibit all the symptoms characteristic of the disease. Five weeks after the accident, as the patient was getting worse, and there was fear of the eyeball sloughing, the common carotid artery of the same side was tied. The patient speedily and completely recovered, and now (eighteen months after the operation) remains well.

The second case was of spontaneous origin, in a woman aged 47. It occurred suddenly soon after she got out of bed. It had existed ten months. Beyond rest and cold lotions, very little treatment had been submitted to. It occasioned considerable distress, and incapacitated her from much work, as all exertion increased the suffering. It was probable that before long she would have to submit to more active means.

The third case was also spontaneous in its origin. For a long time the true cause of it was very obscure. The protrusion of the globe was excessive. Although ligature of the carotid (which was resorted to) was successful in arresting the protrusion of the eye, owing to other tumours which the patient suffered from, his health continued to decline, and he died exhausted eighteen months after the operation. The eyeball had collapsed, and had given no further trouble. For some time before the patient's death the disease was known to be malignant. A *post mortem* examination revealed a tumour developed in the cavernous sinus, pressing upon the ophthalmic vein, and passing into the orbit and the zygomatic fossa. Another tumour, which also during life had been pulsating, passed through an opening in the right parietal bone on to the brain. A large tumour projected externally from the sternum, and also into the cavity of the chest. The thyroid was a large mass of malignant degeneration.

The second *post mortem* examination was of the body of Mrs. J—, whose case was reported in the first series of cases. She died upwards of five years after the operation had been performed, since which, until a few days before her death, she had generally been in good health. The fatal disorder was thought to be acute bronchitis; she suddenly became comatose, and died soon afterwards. The entire brain was

found to be small; and the anterior lobe of the cerebrum on the side in which the carotid had been tied was considerably smaller than that on the other side. This condition, however, the author thought could hardly be attributed to the ligation of the vessel, for which he gave his reasons. On the side of the sella Turcica, just as the ophthalmic artery was given off from the carotid, was found a circumscribed aneurism, filled with a solid coagulum, which pressed upon the ophthalmic vein, and thus occasioned the protrusion of the eyeball.

The author thought these seven cases and the three *post mortem* examinations satisfactorily showed the true cause of the ocular protrusion to be pressure upon the post-ocular veins, which interfered with the free return of blood from the eye and orbit. He contended that usually there was no disease whatever in the orbit itself, the condition of the parts in it being merely passive, as a swollen limb is below a large popliteal or axillary aneurism; and that though a circumscribed aneurism, as in most sudden cases of spontaneous origin, or a diffused aneurism from rupture of a bloodvessel in traumatic cases, was the most common cause of the development of the affection, this was by no means a necessary condition for the existence of it. He believed that it might be induced by anything which causes pressure upon the ophthalmic veins or difficulty in the return of blood from them. Though in the most acute form the disease had been rarely seen, and its nature had been misunderstood, the author was inclined to think that in more chronic and much subdued degrees it was not so very uncommon. He considered that in many cases of protruded eyeballs in weak and delicate persons, in those with bronchocele or cervical tumours, and where there is impeded circulation from disease of the heart (particularly of the right cavities) or of the lungs, the disease is essentially of the same character as the more acute affection, though at first sight they may appear to be very different, and certainly do require such different management.

surgeons on the Continent, I think it may be interesting and useful to reprint the account that I originally published in the year 1855.

"Cases of eversion following the operation of dividing the internal rectus muscle, sometimes come before our notice. As this is a very distressing deformity,—far worse, in fact, than that for which the operation was originally performed, patients are very anxious to have something done for its removal. I have now operated on five of these cases with so satisfactory a result that I think it may be interesting to the profession if I describe the mode of proceeding that I adopt.

"I may premise that the operation I am about to describe is somewhat difficult and tedious, and should be performed under chloroform, and much of its success depends upon careful attention to minute details. Having freely exposed the globe by means of the wire speculum, the parts covering the inner parts of the globe, including conjunctiva, subconjunctival fascia, old cicatrix and muscle, with condensed tissue around it, must be all carefully dissected off the sclerotic, commencing about two lines from the inner margin of the cornea, and extending upwards and downwards, so as to expose the inner third of the surface of the globe. This dissection must be carefully made so as to preserve the flap entire; it can most readily be done with a pair of scissors. When this stage of the operation is completed, the external rectus muscle must be divided. It is better to defer this part of the operation until now, because the action of the external rectus is useful in keeping the globe well fixed outwards during the first stage of the operation. The next part of the operation is the most difficult and the most important. It consists in passing the sutures. For this purpose small semicircular needles must be used, armed with a piece of fine silk: the flap that has been raised from the eyeball must be firmly held with a pair of forceps, and drawn forward so as to make it tense; the needle must then be passed through it, as low down—that is, as near the inner corner—as possible. Two or three sutures may be passed in this way, at intervals of about two lines. The corresponding part of each suture must then be passed through that portion of conjunctiva which has been left attached to the sclerotic near the cornea. This constitutes another difficulty, because the membrane is here so thin that the fine silk is apt to cut through; this I found a serious difficulty in my first operation, and one that materially interfered with success. In order to obviate this, I adopt now the following expedients:—I first separate this portion a little upwards towards the cornea; the needle must then be passed through it, and then back again, so as to include a portion, which must be tied tightly, so as to prevent it from tearing out. The next point is to cut away all that portion of the lower flap that can be spared beyond the part where the suture has entered, merely leaving sufficient margin to hold it. The silks may be now drawn tightly, and tied to the end that is already fixed near the cornea. The immediate effect of this proceeding ought to be to procure some inversion, if the various steps of the operation have been properly performed. The hope and intention are, to get the parts to unite to the globe in their new position, and thus retain the eye. This, however, is only partially the case; there is always some tendency to relapse, and in two cases I had to repeat the operation, but with ultimate success. The sutures may be allowed to remain until they ulcerate through; the subsequent inflammation is usually slight. The amount of mobility in the eye is very limited, but so long as it occupies a central position this circumstance is not found practically to occasion much deformity, and is

## Correspondence.

### MR. CRITCHETT'S OPERATION FOR EXTREME DIVERGENT STRABISMUS.

LETTER FROM GEORGE CRITCHETT, ESQ.

SIR,—In the last number of your JOURNAL (December 17th) there is a paper by Mr. Vose Solomon upon the Radical Cure of Extreme Divergent Strabismus. In that paper allusion is made to my method of operating for this deformity in the following terms. 3. "A third plan had been to excise the belly of the inner rectus, and then bring its cut ends together with sutures, the operation being concluded by a tenotomy of the external rectus. Of this method, invented and practised by Mr. Critchett, it may be sufficient to note, that in the hands of that able surgeon, the globe sometimes suppurated. Moreover, it is not a physiological proceeding, as normal convergence is not restored by it."

In this short paragraph three serious errors occur. 1. The method of operating is wrongly described. 2. Suppuration of the globe has never followed the operation in my hands, or, as far as I know, in the hands of others. 3. The power of the inner rectus is considerably restored. As the method I originally proposed has been extensively and successfully practised during the last nine years, not only by myself but by several of my colleagues, and by ophthalmic



an immense improvement upon the facial discord resulting from extreme eversion.

My friend and colleague Mr. Bowman has performed this operation at the Ophthalmic Hospital, with his usual neatness and dexterity, and the effect was very perfect. My own experience would lead me now to undertake such a case with confidence in the result, if the patient would persevere; if sufficient effect is not obtained by the first operation, a second is almost sure to succeed. I may mention that one favourable effect of the operation is the drawing forward and restoring the inner caruncle to its natural place, the deformity being much increased by the sinking of this part.

During the nine years that have elapsed since this paper was published, I have operated upon a considerable number of cases, including various degrees of this deformity, both in public and in private practice, and the result has been most satisfactory. Further experience has enabled me to infuse much greater certainty into the operation than during my earlier efforts. I find that by regulating the position where the needles are passed through the flap that has been dissected up, I can restore the eye with great nicety and precision to the exact degree of inversion that I wish. Although I am strongly convinced that this is a safe and efficient operation, I am willing to substitute another proceeding, if it recommend itself to my judgment as preferable to my own, but until such an operation is devised, I am anxious that my method of operating should be fairly stated and fully understood.

I am, etc., GEORGE CRITCHETT.

75, Harley Street, December 19th, 1864.

#### DR. KINGSLEY'S ARTIFICIAL VELUM.

LETTER FROM EDWIN SERCOMBE, ESQ.

SIR,—Dr. Kingsley dismisses the question of the durability of his artificial velum very satisfactorily to his own mind, no doubt; but I, for one, am not so easily satisfied. Dr. Kingsley stated in his paper that the rubber of which it is made is specially prepared for the purpose. Now, this cannot be kept in stock at "any rubber factory". But, supposing this difficulty overcome, is it likely that the ordinary workmen of any rubber factory would be able to attach the gold tubing through which the fastening of the artificial velum to the teeth is effected? Those who know the nicety necessary in all dental work will not believe this could be done satisfactorily by other hands than those of a dental workman. I think, therefore, the durability of each velum is an important question which has not been satisfactorily disposed of by Dr. Kingsley.

Another important practical point occurs to me. The success of Dr. Kingsley's apparatus depends, on his own statement, upon an accurate adaptation to the fauces. Nothing is more common than an alteration in the size of the tonsils. I have just seen one of my own cases of cleft palate in which these glands have recently grown very much. Such a change would necessitate a reconstruction of every part.

I have never doubted the talents of the body of English dentists, although we are generally less loud in our own praise than our friends across the water are of theirs; but I still say—and, if it were not that I should unduly extend this letter, I would quote some of the remarks made at the different meetings at which this apparatus has been exhibited in America—to show that the Americans themselves think that the apparatus can be only successfully made by the few—I still say that it is so elaborate in its construction, that I believe few only would be able to construct it. But, sir, it will be enough for me to ex-

plain to your readers that the very first step is to take an impression of the posterior nares and the fauces in plaster of Paris. Supposing the patient to have the greatest self-control, and the manipulator to be very expert, I think your readers will agree with me that the risk to life is by no means trifling from the possible falling of a portion of plaster into the trachea; while all manipulators are not so expert as to render such a proceeding safe in their hands. Thus at the very threshold we are met by a necessary condition, extremely difficult, and even, I believe, risky to life, to comply with.

I will not say a word now about my apparatus, as I quite intend shortly to bring it before a competent jury to decide on its merits.

The last sentence of Dr. Kingsley's letter quite refreshes me; it is so unlike the opinion entertained by Northerners generally of their English *confrères*. I may perhaps just quote the language of one at a recent meeting of the American Dental Convention, who, speaking of this very apparatus now under discussion, said "he believed these great triumphs legitimately belonged to American dentistry, and hoped that it would continue as heretofore, ahead."

I am, etc., EDWIN SERCOMBE.

49, Brook Street.

#### TREATMENT OF PURULENT OPHTHALMIA.

SIR,—With a very limited experience in the treatment of purulent ophthalmia, it becomes me to speak with diffidence of the formulæ prescribed by others; but I really cannot avoid hazarding the opinion that a lotion of the strength indicated in the JOURNAL at page 659 would be much more likely to accelerate destructive inflammation than to arrest it. Possibly there may be some error in the formula, hereafter to be corrected.

After having, perhaps, inflicted my share of mischief in the treatment of infantile ophthalmia, I became long ago convinced that frequent ablation with warm water, and the application to the eyes of a very weak solution of nitrate of silver in distilled water—in the proportion at first of one quarter of a grain to the ounce—twice or thrice in twenty-four hours, affords the best chance for the preservation of the sight, and constitutes almost all that is required in the way of external treatment.

The internal treatment must depend upon the peculiarity of each patient; but may be summed up in "occasional doses of calomel, with jalapine, when required." Beyond slightly increasing the strength of the solution as the disease declines, there is little need of any addition to the above.

With the most ordinary cleanliness, I fancy that any danger to the patient's eyes from the presence of matter may be regarded as imaginary and unworthy of serious consideration.

Trusting that there is nothing herein contained at which an old acquaintance can take offence.

I am, etc.,

C. DE C.

W. Cambridge-shire, Dec. 1864.

AMMONIA IN FIRES. An apothecary at Nantes has discovered by accident that ammonia will put out fires. Seventy litres of benzine in his cellar caught fire. Water was being poured into the cellar without producing any effect, when the apothecary himself took up a pail which was standing neglected in a corner, and emptied the contents into the cellar. To his astonishment the flames were quenched as if by magic, and upon examination he found that the pail which belonged to his laboratory had contained a quantity of liquid ammonia.

## Medical News.

**APOTHECARIES' HALL.** On December 15th, the following Licentiates were admitted:—

Daniel, William Clement, Heath House, Commercial Road  
Dawson, Charles William, York  
Edger, Warren, Kirkby Stephen, Westmoreland  
Hallen, Edward Cresswell, Dudley, Worcestershire  
Jackson, George, Plymouth

At the same Court, the following passed the first examination:—

Gowing, Benjamin Chaston, City's Hospital  
Mackinnon, Henry William Alexander, King's College Hospital  
Raby, John, St. Thomas's Hospital  
Roper, Robert Gear, St. Bartholomew's Hospital  
Smith, Joseph William, King's College Hospital  
Ward, Frederic Henry, St. Thomas's Hospital

### APPOINTMENTS.

FENWICK, George H., M.D., appointed Physician to the Montreal General Hospital.  
STONE, Robert Sidney, L.R.C.P., appointed Resident Surgeon to the Civil Hospital at the Marignans.  
TRAPANI, Giovanni Battista, M.D., to be Collector of Customs in Malta.

### ARMY.

BURTON, Staff-Surgeon-Major F. J., M.D., retiring on half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.  
MASSY, Staff-Surgeon H. H., M.D., to be Staff-Surgeon-Major, having completed twenty years' full-pay service.  
THOMPSON, Surgeon J. A. W., M.D., 80th Foot, to be Surgeon-Major, having completed twenty years' full-pay service.

### ROYAL NAVY.

BAXTER, W. H., Esq., Surgeon, to the *Cadmus*.  
CAMERON, W. H., Esq., Surgeon, to the *Cadmus*.  
COLLINS, Alexander, M.B., Assistant-Surgeon, to be Surgeon.  
COWEN, Philip, Esq., Acting Assistant-Surgeon, to the *Highflyer*.  
McKENNA, Arthur, M.D., Assistant-Surgeon, to be Surgeon.  
ROBERTSON, Archibald G., Esq., Acting Assistant-Surgeon, to the *Highflyer*.  
WALLACE, Peter W., M.D., Assistant-Surgeon, to be Surgeon.

**VOLUNTEERS. (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—**

DANE, T., Esq., to be Assistant-Surgeon West Middlesex R.V.  
FINEGAN, J., M.D., to be Assistant-Surgeon Liverpool Irish R.V.  
SAMUELS, A., M.D., to be Honorary Assistant-Surgeon Liverpool Irish R.V.  
TAYLOR, J. S., Esq., to be Surgeon 5th Lancashire R.V.  
WILSON, R., M.D., to be Surgeon 2nd Northumberland A.V.

### DEATHS.

BROWN. On December 19th, at Rochester, aged 2½ years, Frederick Kilmore, son of \*Frederick James Brown, M.D.  
BULL, Charles, Esq., Surgeon, formerly of Diss, at Norwich, on December 5.  
FARRARUS, William C., Esq., Assistant-Surgeon, R.N., on board H.M.S. *Steady*, aged 32, on November 13.  
\*GODFREY, Joseph J., Esq., at Liverpool, aged 76, on December 14.  
HARRIES. On December 5, at Bath, Augustus Edwin, youngest child of \*Charles A. Harries, Esq.  
HAWKINS. On November 30, at Exeter, Penelope F., wife of Thomas Hawkins, Esq., Surgeon.  
JORDEN, William P., Esq., Surgeon, at 12, Lower Belgrave Street, aged 55, on December 11.  
SEELY, James, Esq., Surgeon, at Hebburne, Victoria, aged 46, on November 14.  
SIMPSON, George, jun., Esq., Surgeon, at Gower Street, aged 35, on December 19.  
TIPPETS, Edward, Esq., Surgeon, at Elm Grove, Frompton, on December 14.

**UNIVERSITY COLLEGE HOSPITAL.** The sum of £150 has been bestowed on this charity by Mrs. Penn.

**STATUE OF LAENNEC.** A subscription has been opened in France by decree Imperial for the purpose of erecting a statue to Laennec.

**POLISH MEDICAL STUDENTS IN PARIS.** The Emperor of the French has through his Minister of Instruction expressed his wish that all Polish students be admitted to lectures in the different universities of France without payment of fees.

**REQUEST.** By will Colonel Onslow Baker, of the Indian army, leaves to the Consumption Hospital, Fulham, £100.

**THE SOCIAL SCIENCE ASSOCIATION** has accepted the very warm invitation given them by the Mayor and Corporation and Chamber of Commerce of Sheffield to hold their next annual meeting in that town.

**M. TARDIEU.** It was lately bruited about in Paris, and for a time believed by all the medical world in France, that M. Tardieu had been elected Minister of Public Instruction.

**DONATIONS.** The Royal Orthopædic Hospital has received from the Marquis of Westminster a donation of £200; and the Hospital for Diseases of the Chest, Victoria Park, £500.

**SANITARY INSPECTION OF HOSPITALS.** Dr. Dane has been authorised to proceed to Norwich, Ipswich, Langward Fort, and Harwich, for the purpose of making his half-yearly sanitary inspection of the barracks and hospitals at those stations.

**MEDICAL CANDIDATE FOR A CORONERSHIP.** Dr. Kemp has addressed a circular to the members of the Herefordshire Medical Association announcing his probable intention to offer himself as candidate for the office of coroner for the Leominster division of the county.

**SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.** This Society has just received from Mrs. Penn, at the hands of W. Owen Lucas, Esq., a benefaction of £150. We are happy to add that this half-year the allowance made by the Society to 52 widows and 21 children of its former members amounts to £1,160—a noble amount to be spent twice a year in relief.

**ROYAL COLLEGE OF SURGEONS.** During the present week, upwards of eighty gentlemen have undergone the preliminary literary examination by the College of Preceptors for the diploma of membership of the College. The result will not be known until the next meeting of the Court of Examiners, about the 16th proximo, when the report from the College of Preceptors will be received, and the result communicated to the candidates.

**THE HOSPITAL AT VIENNA.** On the 12th inst., the stone to the newly-built Rudolph's Hospital at Vienna was laid by his Majesty in person. A document laid in the stone was signed by the Emperor, the Empress, the little Crown Prince, nine Archdukes, and Archduchesses, Francis d'Este Duke of Modena, and by all the Ministers and high dignitaries of State. The hospital, which has room for one thousand patients, is the first edifice built by the State for pacific purposes during the reign of the Emperor Joseph.

**VEXATIOUS PROSECUTIONS.** At a meeting of the Reading Pathological Society, held on December 13th, 1864, it was proposed by Mr. May, seconded by Mr. Vines, and carried unanimously: "That the members of this Society desire to express their sympathy with Mr. Davies in the late trial of Wright v. Davies, and their satisfaction with the verdict; and they regret that members of the medical profession should be exposed to harassing and vexatious prosecutions." It was also resolved that the preceding resolution be sent for insertion in the *BRITISH MEDICAL JOURNAL*, *Lancet*, and *Medical Times and Gazette*. [Might not the sympathy of the profession be more substantially expressed? Mr. Davies has, no doubt, been put to considerable expenses at the trial. We would suggest to the Reading Pathological Society, that it might open a subscription for the purpose of paying these expenses. EDITOR.]



UNIVERSITY OF CAMBRIDGE. Natural Sciences Tripos, December 15th. *First Class*: Danby (Downing); Bradbury (Downing); Rankin (Trinity); Cooper (Caius); Hon. A. Strutt (Trinity). *Second Class*: Layton (Queen's); Hodgson (Trinity); Darroch (Trinity); Callis (Catherine); Barclay (Trinity). *Third Class*: Chambers (Trinity); Wilson (Caius); Jones (Queen's); Berners (Trinity Hall). The Examiners were: P. W. Latham, M.D.; C. Babington, B.D.; S. G. Phear, B.D.; and W. H. Brown, M.A.

ACTONIAN PRIZE ESSAY. The Actonian Prize or Prizes of the Royal Institution will be awarded in the year 1865 to an Essay or Essays illustrative of the Wisdom and Beneficence of the Almighty as manifested in any of the Phenomena of Radiation. The prize fund will be 200 guineas, and may be awarded as a single prize, or in sums not less than 100 guineas each, or withheld altogether, as the managers in their judgment should think proper. Competitors are requested to send in their Essays on or before December 31st. The adjudication will be made in April 1865.

ROYAL HUMANE SOCIETY. Of suicides during the past five years in Hyde Park there were 86 attempts, of which 32 were fatal, the majority of deaths being caused by persons hiding themselves in the park of an evening, and when the gates were closed going deliberately and silently into the water without the chance of being seen. Fifty-four persons were rescued and recovered by the society's officers. It is gratifying to find that very rarely, if ever, is a second attempt made to destroy themselves by the rescued people, only one case of a renewed attempt having come under the notice of the society.

HONOURS TO SCIENTIFIC MEN. In the *Moniteur* has appeared a report of M. Duruy, giving the names of those who, besides M. Ruhmkorff (who gained the 50,000 francs prize), have done the state some service in the application of voltaic electricity to useful purposes, and who are adjudged honourable mention. They are M. Lenoir, for his gas-engine; M. Caselli, for his telegraphic apparatus; M. Gaiffe, for his method of engraving by electricity; M. Bonelli, for his electric loom; Mr. Hughes, for his electro-printer; M. Froment, for his electro-motion engines; MM. Foucault and Serrin, for their electric lamp; and one or two more of less note. M. Froment is recommended for the officers' cross of the Legion of Honour. The same prize will be adjudged for the same purpose in 1868.

THE INDIAN MEDICAL SERVICE. It is with the most sincere pleasure that we find ourselves for once able to praise heartily an act of the Indian Secretary of State. In a despatch, dated November 7th, he reconstitutes the separate medical service for India, throws over all the recent ideas, and offers terms splendidly liberal—terms which will most assuredly fulfil his expressed hope of securing “gentlemen of good social position, liberal education, and professional ability.” Under the new regulations surgeons appointed to the Indian service will not be required to serve out of India except with their own consent, but will retain their full rank in any part of the world. Formerly every assistant-surgeon had to wait for a death vacancy to become a full surgeon—a period of 17 years. His salary during that time might remain almost unaltered. The new despatch orders that every assistant shall, after 12 years' service, become a surgeon, whether there is a vacancy or no; that the grade of surgeon-major shall be introduced, that separate inspectors and deputy-inspectors general shall be appointed to the local service, and that they shall hold office only for tours of five years

each, thus greatly accelerating promotion. Moreover, the pay is fixed on an entirely novel scale. The assistant-surgeon begins his career on a minimum pay of £350 a year, as he did before, but it is to rise steadily with length of service till he receives as unemployed or *minimum* pay *per annum*:—After five years, £365 *per annum*; after six years, £472; after 10 years, £492; after 12 years (surgeon), £770; after 15 years, £812; after 20 years (surgeon-major), £1,022; after 25 years, £1,065. This, be it remembered, is when unemployed—i.e., the absolute *minimum* wage, the allowances for employ being, according to the rules laid down in the despatch, at least £250 more. As an Indian officer is never, except for a few months in a lifetime, left out of employ, the true *minimum* rates may be roughly stated at £350 to begin with, £560 after five years, £700 after ten, £1,000 after 15, and £1,200 after 20 years' service—really good pay. These rates, moreover, are independent of prizes, of an inspectorship on £3,000 a year, and at least three sub-inspectorships on £2,200 each, of a monopoly of stations with practice, of irregular cavalry regiments, and of various other exceedingly pleasant and profitable incidents of the career. This, however, is not all. The rates of pension have also been revised, and amount for the future to—After 17 years' service, say 41 years of age, £220; after 21 years' service, say 45 years of age, £292; after 24 years' service, say 48 years of age, £365; after 27 years' service, say 51 years of age, £465; after 30 years' service, say 54 years of age, £550; independently of the £300 a year granted by the Medical Retiring Fund, which fund, with all its liabilities, now very great, is henceforward to be managed and guaranteed by the State. The pensions, are, in other words, brought up within a third of those granted to the civil service, the best paid body of men who ever existed under a civilised government. And, in addition to all this, a deputy or full inspector will, after his five years' tour, be entitled to £250 a year in excess of the pension of his grade. To put the matter in ordinary English, out of official formulas, a young surgeon who enters this service at twenty-four will receive £350 a year; rise £50 year as a *minimum* for 20 years, and return home at fifty with a pension of £650 a year for ever, enjoying meanwhile all manner of extra chances, depending on special ability, special services, or special interest made by himself in India. If those terms do not bring good men into the service then competition must be abandoned for direct nomination, for no government in its senses would or could offer higher; but we have no fear of the result. Sir Charles Wood has broken through many rules and more precedents to settle the matter once for all, to give the view of the House of Commons a fair and honest trial, to grant the profession terms heavy enough to make good men willing to compete, and to “diffuse through them, when appointed, a spirit of satisfaction and contentment.” If this despatch should fail there will be no remedy except to propose once more to the House to abolish competition, and, if it will not consent, to refuse all responsibility for the health of Her Majesty's subjects eastward of Alexandria. (*Spectator*.)

THE BELFAST RIOTS CASUALTIES. Dr. Murray has published a pamphlet, giving an account of the casualties during the Belfast riots. The statistics have been compiled from returns made by seventy-three out of seventy-four medical men in town, and do not include trivial injuries. It appears that 316 persons were injured—the hands of the rioters—298 male and 18 females; 299 recovered; 11 died; and 6 were still under treatment. Nine of the 11 deaths were due to gunshot injuries, and two to cuttings and

lacerations. There were 98 cases of gunshot wounds, of which 64 were slight and 34 severe; nine of the latter terminating, as before mentioned, in death. Under the head of "slight" are reckoned injuries from shot and superficial wounds from bullets and slugs. There were 5 cases of stabbing. The number of contusions and lacerations was 212; of these 149 were slight, and 63 severe. Many of the sufferers sustained serious and permanent injury, the marks of which they will retain through life. Throughout the town, to an extent which can hardly be realised, persons have had their health seriously impaired, and their nervous system shattered by fright. One case, at least, of mania is clearly traceable to the riots. (*Dublin Medical Press.*)

## Varieties.

PROFESSOR ROSE was a most amiable and liberal man. His students and assistants were his friends, and were constantly invited to his house. He never made use of his students to perform the drudgery and routine of his private researches. He seems even to have disliked receiving fees for his instruction. His lectures were illustrated in the simplest manner, and for most of his experiments he required only an ordinary test-tube. His dislike to display gave rise to the story that, after his assistant had caused the tarnished spirit-lamps to be brightened, the professor was found busily employed in restoring them to their former dingy hue. "He could not talk," he said, "amid so much glitter."

PREGNANCY OR OVARIAN DISEASE. A circumstance has lately occurred in Ireland which has caused a good deal of "talk." A married female, mother of three children, presented herself to an hospital surgeon, and stated that for a year and a half she had observed a gradually increasing abdominal tumour, which gave her annoyance and interfered with her health. She was received into hospital, and after some weeks' residence the tumour was pronounced ovarian. She was considered a favourable case for operation; but previous to such a remedy a consultation was called. There were a goodly number of medics present, and among them "professors" and "clinical teachers." After due examination of the patient, some thought immediate operation and some deferred interference advisable. The latter view was adopted, and in a few nights after the consultation the intended operator was suddenly summoned to the woman's bedside, when lo! nature had operated in relieving her of a five months' fetus! It would seem that her husband had been absent some two years, and the tumour annoying her, she laid her plan for being legitimately, and, on sound principles, free from her burden, and she succeeded!—a caution as to a correct diagnosis being formed in abdominal tumours. It is stated that particulars will appear in the transactions of a medical society. (*Dublin Medical Press.*)

SCIENCE AND THE BULLY. A writer in *Blackwood's Magazine* makes the following remarks on the examination of medical witnesses in courts of law:—"The grandest achievement of all is a poisoning case—something that is to be two-thirds emotional and one-third scientific—where the interest vacillates between the most powerful passions and the pangs of arsenic; and the listener is alternately carried from the domestic hearth to the laboratory and back again. Now, when one is aware that the 'learned Serjeant' knows as much about chemistry as a washerwoman does of the 'wave theory', the display of impromptu

learning he makes is positively astounding. Armed with an hour's reading of Beck and Orfila, the great man comes down to court to puzzle, bewilder, and very often to confute men of real ability and acquirement; to hold them up to the world as hopelessly ignorant of all that they had devoted their lives to master; and in some cases to exhibit the very science they profess as a mass of crude disjointed facts, from which no inference could be drawn, or a safe conclusion derived. . . . A pitiable spectacle is that poor man of science, pilloried up in the witness-box, and pelted by the flippant ignorance of his examiner! What a contrast between the diffident caution of true knowledge, and the bold assurance, the chuckling confidence, the vainglorious self-satisfaction, and mock triumphant delight of his questioner! Mark the practised leer, the Old Bailey grin with which he comments on something that science still regards as uncertain or obscure, and hear him declare to the jury that, in the present state of medical knowledge, there is not a man in court might not be indicted for having handed the salt or the mustard to his neighbour!"

SUICIDE IN THE VIENNA GARRISON. Professor Engel has collated the statistics of suicide effected in the Vienna garrison during the four years 1859-62, both included. In the short period named no less than seventy-five persons destroyed themselves in this one garrison, averaging from 20,000 to 25,000 men. Of the seventy-five suicides, thirty-four were Austrian Germans—viz., eleven Viennese, ten from other parts of Lower Austria, two Tyrolese, two Styrians, one German Hungarian, and eight German Hanoverians. There were also twelve Bohemians, ten Gallicians, three Servians, one Slavonian, six Hungarian Magyars, one Transylvanian Magyar, four Italians, and one Wallachian, one Bavarian, one Hessian, and one Rhenish Prussian. Thus twenty-seven belonged to the German race, twenty-six to the Slavonian, seven to the Magyar, and five to the Italian. Dr. Engel observes, it is remarkable to learn that, in a body almost equally divided in race, the excitable Italian and the dull Magyar should be the two classes that yielded the fewest suicides. Among the suicides there were forty-two common soldiers, seven officers' servants, nine commissioned officers, three cadets, eleven officers of higher rank, and three medical officers. Hence the number of persons entrusted with charges was the half of the number of common soldiers, and of these eleven were Germans. Besides the officers' servants and the three medical officers, there were two belonging to the military police, two to the transport corps, thirty-two to the infantry, two to the Guards, nine to the Jagers, ten to the cavalry, two to the "Genie" corps, four to the artillery, and two to the sanitary corps and Quartermaster-General's staff. In regard to the modes of death, shooting was most usual; hanging was performed in sixteen cases; cut-throat in six; stabbing in two; opening an artery in one; fall from a window in one, and into a well in one; drowning in one, and poisoning in three. Of the Viennese, all chose every kind of death except shooting; two hanged themselves, four cut their throats, one stabbed himself, one opened an artery, one poisoned himself by sulphuric acid, and one by cyanide of potassium. Of the other Germans, six hanged themselves, and one cut his throat. Of the Bohemians, two hanged themselves, and one cut his throat. Of the Gallicians, four hanged themselves, one drowned himself, one stabbed himself, and three shot themselves. One Italian cut his throat, one threw himself from a window, and one into a well. One Magyar drowned himself. Most of the officers' servants shot themselves with their master's pistols, and two hanged themselves; one policeman and two



of the transport train hanged themselves; two Jagers and two artillerymen hanged themselves and one artilleryman cut his throat. Of the cavalry, two hanged themselves, two cut their throats, and one opened an artery. The Jagers and the infantry soldiers committed suicide by other modes of death than hanging—a fact naturally explained in the latter case by the difficulty experienced of obtaining firearms. Of the superior officers two hanged themselves, one drowned himself, and the remainder shot themselves. Of the three medical officers, one poisoned himself with cyanide of potassium, one cut his throat, and one shot himself with a pistol. In only two cases was there marked disease of the body. (*Spitals Zeitung*, and *Brit. and For. Med.-Chir. Review*.)

### OPERATION DAYS AT THE HOSPITALS.

**MONDAY.**.....Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
**TUESDAY.**....Guy's, 1½ P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
**WEDNESDAY.**...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
**THURSDAY.**....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
**FRIDAY.**.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
**SATURDAY.**....St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations, 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

### MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

**TUESDAY.** Zoological.—Ethnological.  
**THURSDAY.** Royal.

### TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

**COMMUNICATIONS.**—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

**CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

**WE REGRET** to have to defer letters of several correspondents.

**A. B.**—A medical man having only an Apothecary's License cannot legally put on his door-plate the word Surgeon.

**MR. HARTSHORNE.**—We cannot admit further correspondence on the subject; and for very obvious reasons. Two gentlemen differ diametrically as to matters of fact. A. says that B. deposed in a Court of Justice "that £3 was sufficient payment" for a certain surgical attendance, etc., done by A. B., on the other hand, declares that "he gave no evidence whatever as to the fee he (A.) ought to charge for his services." In face of such discrepancies, an editor must needs be dumb.

**E. C.**—We have no doubt that our "disgusted" contemporary knows perfectly well who his homœopathic correspondent is. There can be no great difficulty in eliminating out of four or five medical correspondents who have been allowed to say their say freely against the Association, the one who practises in the globulistic line. At all events, it is no business of ours to enlighten the editor's ignorance, whether real or mock. We will repeat only, that he is not, and as far as we know never has been, a member of the Association.

**CHRISTMAS.**—It will perhaps save some of our readers a little inconvenience by informing them that the Hunterian Museum and the Library of the College of Surgeons will be closed to visitors on Monday, the 26th instant.

**UNFRATERNAL CONDUCT.**—The remarks lately made in this JOURNAL under the head of "Our own Brethren", have, we regret to say, brought us several letters containing details of non-neighbourly and unfraternal behaviour between medical men. One gentleman complains that a brother practitioner, X., who attended a case of midwifery for him, during his unavoidable absence, and attended it under the distinct understanding, both from the woman and himself, that it was not X.'s case, nevertheless sends in a charge to the woman for attendance. Our correspondent says that he himself paid the fee to X., who took it without compunction. He then states how differently he himself had shortly before acted towards X.

"Some time ago, I reduced a dislocation of the humerus in a patient of X.'s during his absence, and, upon his return, gave up the case to him. X. thereupon sent me half-a-guinea, as half the fee, with a note, thanking me for my attendance. I returned him the money, stating in my note I could not allow any unfriendly feeling that existed between us to prevent my acting as I considered one medical man ought to towards another, however placed they might be with each other."

Local jealousies must, we suppose, exist amongst mortal professional men; but we would just remark, that such feelings should not, and need never, interfere with a due and the very strictest attention to all the well-known and ordinarily accepted rules of professional etiquette and ethics.

**A PLEA FOR NITROGEN.**—SIR: The "respirational absorption of nitrogen" was discussed at the late British Association after a paper was read thereon by Mr. Barham, who gave the short historical account, as well as the circumstantial evidences of its being the chief elementary gas, as food for animals and vegetables.

The recent proceedings induce me to lay before your readers reflections on the progress of introducing nitrogen, as the chief element in Nature, since 1832, when cholera first made its appearance in England and Europe. The fatality of this disease then called forth research and thought, how far medicine was founded on the truthful views of the elements of our globe. A natural idea of the origin of the uses of materials (as food and medicine are composed of), first proposed by myself: such fundamental principles were never offered by authors before 1832. Consequently, an entire new field was opened for practice. It may now be said, Woe to that person who dares such inroad with marks of neglect by the *savans*!

If mincing the matter, or flinching from open discussion, had been my plan, epithets of cowardice or inability might have been applied; but such cannot be said. On the contrary, every public and private means have been proposed by me to elucidate utility since 1849; yet silence or indifference has been the result towards a professional man.

As a warm discussion took place, and most severe remarks were afterwards publicly made on Mr. Barham, I desire to know if any one knows the action of assimilation of the gases in the formation of food, etc.

I am, etc.,

WILLIAM PARKER, M.R.C.S., L.A.C.

Bath, November 28th, 1864.

**VACCINATION CERTIFICATE.**—SIR: I fancy the above question has been discussed more than once in the JOURNAL, although your correspondent of last week appears not to be aware of this.

There seems to be no doubt that it is an indictable offence to refuse signing the necessary certificates; but your correspondent seems to think it a peculiar hardship in his case, "not holding a parish appointment." I cannot see the force of his objection. He probably charges his patients five shillings or half a guinea for the operation, while I am paid eightpence or half-a-crown by the Guardians, and have frequently many miles to travel. The "three books containing certificates from the Vaccinator", were probably sent to your correspondent by the Registrar of Births, who might also be Relieving Officer; but I think it is self-evident that the "parish authorities" do not require these certificates, and therefore do not pay for them. They are, in fact, sent to the Registrar General. I contend further, that if these certificates are withheld by medical practitioners, the Vaccination Act must be an entire failure; and while I willingly admit its various imperfections, I cannot see the justice of constituting all medical men public vaccinators (as has been sometimes suggested); neither have I at present seen any satisfactory or practical improvement of it suggested. There are many other points that may be noticed; but I believe I have noticed the chief ones of your correspondent's letter.

I am, etc.,

A PUBLIC VACCINATOR.

December 1864.

[If it be for the public good that every man who vaccinates a child should register the vaccination, why should not the public pay him for registering the act? His patient pays him for vaccinating, not for registering the vaccination. The case of a public vaccinator is different. He undertakes to vaccinate, and also to enter the vaccination. EDITOR.]





# Original Communications.

## SELECTIONS FROM LECTURES ON OPHTHALMIC SURGERY.

By HAYNES WALTON, F.R.C.S., Surgeon to St. Mary's Hospital, and to the Central London Ophthalmic Hospital.

### PROTRUSION OF THE EYEBALL. (*Concluded.*)

*Protrusion from Causes without the Orbit.*

PROTRUSION arising from pressure external to the orbit is apt to be overlooked, unless the surgeon be aware of the probability of the occurrence, and the sources whence the pressure may arise. The position of the orbit exposes it to encroachment on all sides. Diseases of each of the cavities and sinuses around, may reduce its capacity and protrude the eye.

*Morbid Changes in the Cranium.* The most common example from a cerebral origin is to be found in chronic hydrocephalus; the roof of the orbit is pressed down, and the depth of the cavity much lessened. The cause is here at once palpable, and so are most of the disturbing cranial influences. Cerebral tumours may protrude the eye; other changes in the cranium may displace it.

When the physical causes, although cerebral, are less marked, and their seat is not perceptible, headache, loss of memory, fits, partial paralysis, or other indication of lesion in the great nervous mass, with the previous history of the case, will generally determine them.

*Frontal Sinus.* I have met with an example of supuration in the frontal sinus producing protrusion. Distension, with elasticity of the bone over the abscess declared its seat; and evacuation of the pus remedied all disturbance.

Writers speak of hydatid and encysted tumours, and polypi, being found in the above sinus; but such occurrences are remarkably rare.

*Zygomatic Fossa.* I have seen an exostosis, that appeared to have its origin in some part of the temporal or zygomatic fossa, throw the eye forwards. This is the only instance I know of disturbance from this quarter.

*Maxillary Sinus.* The maxillary sinus, or antrum of Highmore, is the seat of the most frequent cause of displacement, for it is frequently diseased; and a tumour of any magnitude having its seat here, can scarcely fail to throw up the orbital floor sufficiently to affect the eye; and such a cause could rarely be occult. Distension in some other direction, and some collateral symptom, would co-exist and determine it; and it matters not what may be the nature of the tumour—whether aneurism by anastomosis; polypus, or other soft growths of a mild or of a cancerous nature; simple exostosis, or malignant affections of the bones. All these have been met with. Suppuration, however, may greatly enlarge the maxillary sinus, which, in the natural state, is very small, without throwing up the orbital boundary. I have met with several examples of this.

Simple accumulation of mucus has been known to distend the antrum and to displace the eye.

*Nasal Fossa.* Nasal tumours—and I allude especially to polypi—could not advance and injure the orbit without detection. A careful examination of the nose would always render the cause apparent.

Obstruction of the lacrymal duct, too, would surely usher in such intrusion.

*Sphenoidal Sinus.* Notwithstanding that I cannot advance any instance of protrusion of the eyeball from a distended sphenoidal sinus, I would wish to impress the possibility of the occurrence; for the anatomical arrangement of the parts, I should say, would seem readily to admit it.

I have shown that the direction which the displaced eyeball may take, affords little or no clue of the exact position of the cause of the protrusion.

It has been supposed that attention to the focal range may assist in ascertaining the position of pressure on the globe of the eye; the theory being that, if behind, the antero-posterior diameter will be lessened, and the range be shortened; if at the side, it will, on the contrary, be lengthened. I question the practical application of this; the imperfection of sight has, in all the cases that I have seen, resulted from decided loss of power in the retina.

With the greatest degree of protrusion, the pupil may be natural; but it may be dilated and moveable, dilated and fixed, or of its natural size and motionless. I am not aware that any practical indication can be gathered from any of its assumed states.

It is a well ascertained fact, that the eyeball may become dislocated by accident, being thrown forwards and firmly fixed in that position. Such an occurrence requires that the force be applied within the orbit, and against the eyeball—a person falling against a hook, for instance. In the case of this kind from which I get my knowledge, the dislocation was reduced. The margin of the upper eyelid, which was invisible, was elevated; and the eyeball pressed back to its place, which it entered with a distinct snap. Pains in the head and in the eye ensued, for which he was cupped and purged. Six days after the accident, all symptoms had disappeared, and vision was quite restored. Dr. Jacob suggests the following solution of the accident: that some persons possess very large eyes and shallow orbits; and often, while examining such eyes, he found that, by pressing the eyelids above and below, he could with ease get a back view of the eye. It was not that he merely saw one-half of the eyeball; but, by a little manipulation, he could obtain a view of the posterior part. Now if, by means of violence, the lids were tucked in, they would grip the back of the eyeball, and produce a protrusion of the organ from the orbit. He could not conceive any other way in which the accident could have happened; because neither the muscles sustained injury, nor was the optic nerve ruptured. Another speaker considered that the snap produced by the reduction of the dislocation proved the fact of the muscles being uninjured.

Some years ago, I was extracting an osseous cataract from a disorganised eye. I made the upper section, and had just got out the cataract with the curette, when, before the eyelids were released, the eyeball was forced out, actually dislocated, and, as it appeared to me, by the action of the orbicularis muscle. The protrusion was evidently increasing; and I quickly put the spoon of the curette under the edge of the upper eyelid, and lifted it forwards, while I pressed the eyeball back and restored it to its place. The whole occurrence could not have occupied twenty seconds. Vitreous humour did not escape.

There are important vascular diseases connected with protrusion of the eyeball that must not be passed over; aneurism by anastomosis, aneurism in the orbit, and intracranial aneurism of the carotid artery. But as these are peculiar, and require a great deal of consideration, I shall devote a lecture to them.

# Transactions of Branches.

## BENGAL BRANCH.

### CASES OF TYPHUS FEVER IN CALCUTTA.

By S. GOODEVE CHUCKERBUTTY, M.D.

[Concluded from p. 679.]

COMMENTARY. The preceding narrative forces upon us the melancholy conviction that a *continued fever* of a fatal type has entered the precincts of Calcutta; for, out of the twelve cases related, above five died—a rate of mortality high enough for any country, and especially so for Calcutta, where, in my own experience of the last fifteen years, I have never known anything of the kind before. This fact suggests two significant questions: 1. Is this the so-called *epidemic fever* which for the last two years has been ravaging the villages of Lower Bengal? 2. Can it be the *typhus fever* of Europe?

To the first question I do not feel that I am in a position to return a satisfactory answer. I do not even know what the epidemic fever is, never having had an opportunity of visiting the places which are said to be stricken with it. Persons have sometimes come under my treatment in the hospital, who, I was told, had had the epidemic fever, but who had passed safely through the acute stage, and were only suffering from chronic intermittent fever and enlargement of the spleen and liver, alone or together, at the time of their admission. These, no doubt, were the sequelæ, and not the essential features, of the epidemic. Occasionally, in private practice, I have had cases of severe intermittents, contracted in the epidemic districts, who had, immediately on getting the disease, removed to Calcutta, and placed themselves under my treatment. To say, upon such data, that I have seen the epidemic fever, would be clearly incorrect. Nor can I make out its exact pathology and symptoms from the reports submitted to Government by Dr. Elliott and the Epidemic Commission. They seem to have laboured with commendable zeal, and to have drawn up able papers; but, whether owing to want of sufficient materials to go upon, or to want of leisure, they seem to have failed in giving detailed descriptions of the progress of the symptoms from day to day, and of the *post mortem* appearances in cases of death. Had I had those facts before me, I should have been able to compare them with mine. In the absence of that information, I am unable to accept statements as to the nature of this epidemic fever.

Apart, however, from all pretension of personal knowledge of the subject, and without professing to understand it from the published reports, I may roughly observe that, during the last three months, I have certainly noticed a much higher rate of mortality from fever in Calcutta than I had ever known to occur during the previous fourteen years. Deaths from remittent fever have been unusually frequent; and even the intermittent cases have terminated fatally oftener than before. Then there have been cases of the red fever and sun-fever; but these have not died, so far as I could learn. I am not aware if there have been any persons dying of typhoid fever this year in this country; but I have heard of some deaths from typhus, though only in a loose way.

In replying to the second question—Can it be the typhus fever of Europe?—to smooth the way, I will, in the first place, quote some descriptions of typhus from English authors.

[Dr. Chuckerbutty here read quotations from the works of Drs. Cullen, T. Watson, Graves, Copland,

and Murchison, as to the characteristics of typhus; and continued:]

In speaking of the geographical distribution of this fever, Dr. Murchison makes the following statement at p. 58 of his work on *Continued Fevers*.

"As yet, there are no authentic records of typhus, such as we see it in this country, having been met with in Asia, Africa, or the tropical parts of America. . . . Dr. Ewart has described two cases of 'typhus' as occurring in the jail of Ajmere, in Bengal; but the characteristic eruption was absent, and there was no evidence of contagion. Dr. Allan Webb, in his *Pathologia Indica*, had previously mentioned two cases of fever observed at Simlah, where petechiæ were present. But the fever is not said to have been contagious; and petechiæ are occasionally observed in the severe remittents of India, which have often been mistaken for typhus. According to Dr. Morehead, typhus is unknown on the continent of India. . . .

"In 1861, Dr. W. Walker, of H.M. Indian Army, described an epidemic of 'typhus' prevalent in the preceding year in the north-western provinces of India, and observed by him in the central prison of Agra. But the evidence that the disease was genuine typhus, as seen in this country, is to my mind not conclusive. An eruption was never detected upon the skin, although it was carefully looked for; the swarthy skin of an East Indian would not suffice to obscure the eruption of typhus in its petechial stage; for I have known the eruption distinctly developed in Africans and East Indians."

I have been thus careful in making the foregoing extracts from some of the best writers on typhus, in order to bring prominently forward the most essential characters of the disease, so that we might so much the more easily compare them with the details of my own cases, and also at the same time subject these latter to the severest test in presence of the adverse opinions of two of the greatest authorities of the day as regards the occurrence of typhus fever in India. Both Drs. Murchison and Morehead are explicit on this point; and both, from their acknowledged ability and learning, deserve to be treated with the highest respect. But, however high their authority in the world of science, it is to facts alone that I wish to appeal in confirmation of my position, that the cases related by me were genuine cases of *typhus fever*. I have been looking out for more than fourteen years for cases of this disease; but never before did I meet with one instance in which I could identify it. The case of Joseph Harlgrave, therefore, came upon me as a real surprise. Since his admission on the 5th of July, up to this day (October 11th, 1864), my wards have never been free from typhus fever, although the total number received under me has been as yet only twelve. Of the other varieties of fever admitted into my wards during the same period, there were, intermittents 119, died 6; remittents 26, died 5; red fever 1, cured; sun-fever 2, cured; doubtful or suspicious cases, recovered fast, 3; heat-apoplexy 3, all died.

Of the 12 cases of typhus, 5 have died, 5 have been discharged cured, 1 is thoroughly convalescent, and 1 was admitted only four days ago. Thus, while the mortality from intermittent fever was 5 per cent., and from remittent fever 19.23 per cent., from the typhus fever it has been 41½ per cent.

Of the 12 cases of typhus fever, 10 were in men, and 2 in women. With regard to their nationalities and occupations, 1 was a Portuguese sailor, 1 a Swedish sailor, 3 East Indians, 2 country-born Europeans, 1 a Mahomedan boatman, 2 English sailors, 2 Irish, the man a sailor.

With regard to age, 3 were 25 years old; 2, 30; 1, 44; 1, 32; 1, 37; 1, 21; 1, 24; 1, 36; 1, 23.



One was admitted with a fever of two days' duration; 1, of three days'; 3, of four days'; 1, of six days'; 2, of nine days'; 1, of ten days'; 1, of eleven days'; 1, of twelve days'; 1, of fourteen days'. In the last case, the disease was marked by dysentery till some days after his admission.

Of the cases cured, the whole time from invasion to discharge was, in 2, thirty days; 1, twenty-seven days; 1, eighteen days; 1, seventeen days. Of the 2 cases in the hospital, in 1 the duration has been fifty-six days, and in 1 nine days. Of the cases that died, the period from invasion to death was in 1, seventeen days; 1, thirteen days; 1, sixteen days; 1, nine days; 1, twenty days.

In eleven patients, the *peculiar rash* was noticed to be present. It was of a mulberry colour; macular in form; varying in size; sometimes appearing elevated to the eye, like the eruption of measles; sometimes no higher than the skin; always disappearing on pressure, and returning on its removal; observed between the third and seventh days, sometimes later; and fading away and vanishing after five or six days, sometimes sooner, sometimes later. The only case in which the eruption could not be made out was that of the Mahomedan, though he had all the other symptoms of typhus.

The pulse was frequent and weak in all. The respirations were hurried and more or less difficult in all. Headache and pain in the back were met with in most. The conjunctivæ were congested in all. The pupils were sometimes contracted, sometimes of moderate size and sluggish; never dilated. The skin was hotter than natural, with, in some cases, the cuticle desquamating during convalescence. The tongue was loaded, dry and black, or glazed. The teeth and lips were covered with black sordes. The countenance was in all heavy and flushed. The mind was in a state of delirium, stupor, or coma. Muscular tremors were present in all; and subsultus tendinum in most. Dulness of hearing and want of sleep and appetite existed in almost all. The bowels were mostly constipated; sometimes loose; in the worst cases, moved involuntarily. The urine was scanty and high coloured, not albuminous. There was no pain in the abdomen, except sometimes in the hypochondria; only in one or two cases there was gurgling for one or two days in the iliac regions; tympanitis in most. Prostration of strength was always considerable; and, when recovery took place, the patients were long in regaining their strength.

The entire duration of their stay in the hospital, when discharged cured, was, in one, thirty-two days; in one, nine days; in one, eighteen days; in one, twenty-nine days; in one, fifty days. Death occurred in two in four days; in one, in seventeen days; in one, five days; in one, ten days. Of the two cases still in hospital, one man has been in fifty-two days, and the other as yet only four days.

Of the morbid appearances, congestions of the lungs, kidneys, and brain have been the most frequent; occasionally, also, of portions of the intestines and stomach, and sometimes of the liver and spleen to a small extent; flabbiness of the heart, and blackness and fluidity of the blood, without coagula, in all cases; prominence of Brunner's glands in one; affection of the Peyer's patches in none; and in one case there was found an osseous piece attached to the falx cerebri, but not causing pressure on the brain. The cerebral membranes were always congested, and contained much serum.

It remains now to consider the question of contagion. Is the fever, of which twelve cases have been given above, contagious? This is a point more easy to moot than to answer. Although now-a-days the contagiousness of typhus fever is almost universally

admitted, yet it required long years ere the profession was unanimous about it. The fact is, that it is one thing to be morally convinced that a disease is contagious, and another thing to be able to bring home that conviction to others by unquestionable proofs. Even to this day, the contagiousness of cholera is a debateable ground. Those who believe it to be contagious appeal, apparently, to overwhelming evidence, when they bring forward cases of its occurrence in persons who had had intercourse with cholera patients, and who had, in their opinions, carried it with them from one place to another. Those, again, who, like myself, have seen the disease on a large scale, without its infecting the attendants more than could be accounted for by the atmospheric condition, reject the contagiousness of cholera *in toto*. I mention this fact, not to call in question the contagiousness of typhus, but simply to show how difficult it is to prove it. That typhus is contagious is granted. But that my cases were those of typhus is held to be doubtful, till they are proved to be contagious. To solve this difficulty, I fear I cannot offer much in the shape of direct demonstration; and it is on that account that I wish to impress on my professional brethren the nature of the task. But, because I cannot advance direct proofs, it does not follow that the disease is not contagious. In favour of it, we have: 1. The interesting fact that the persons affected had mostly led a seafaring life; 2. That the majority of them came from Loll Bazaar and its immediate vicinity, there being only one from the shipping, one from the Almshouse, and one from the Nimtollah Ghaut; 3. That at no one time were there more than two or three cases distributed through four wards of the hospital; 4. That the ventilation of the hospital is most complete; 5. That the beddings were immediately and invariably destroyed on the discharge or death of every case; and the bedsteads, after being washed with boiling water, were left exposed to the sun for some days before being returned to the wards. We are bound, therefore, to take into account the short duration of the disease among us as yet, the small number of cases, the scarcity of them in the hospital, the thoroughness of the ventilation, and the adoption of precautionary measures against the spread of contagion, in disposing of this question; and then say, after allowing for the efficacy of these things in checking contagion, whether the fever under notice is contagious or not. For my own part, I believe that it is contagious; for in one man (James Brown), who was admitted for dysentery, it did appear as if, the fever had been caught from Harlgrave, who was in the same boarding-house, either outside or in the hospital. In a second instance, both the husband and wife were admitted with it on the same day; the wife having been ill twelve days, and the husband, nine days; consequently, the latter having most probably caught the fever from the former. Besides, there were also several slighter cases, which certainly did occur in the hospital; but as in them the rash was not last long, and the fever soon got well, I have placed them among the suspected cases. No, I think, if due allowance be made for all these things, to the conclusion is inevitable that the fever I alluded to is contagious; and, further, that Wales typhus—an opinion fully supported by its high mortality, which is as high as during some of the worst years in London, as noticed by Wilson on 132; How did Harlgrave catch this fever? 33; acting bringing it from the Portuguese ship? 1 and; Dr. Gilman inquiry on this point, but could elicit nothing, 249, 375; he get it on shore? The only circumstances which Medici of it are, that an epidemic fever is known 192; Comraging in Bengal; that all the fevers the

been peculiarly fatal; and that the overcrowded state of the sailors' boarding-houses, situated as they are in the dirtiest part of the town, in Loll Bazaar, is extremely likely to have given rise to it.

### BATH AND BRISTOL BRANCH.

#### CASE OF STRANGULATED CONGENITAL HERNIA.

By AUGUSTIN PRICHARD, Esq., Senior Surgeon to the Bristol Royal Infirmary.

[Read December 1st, 1864.]

JOHN JONES, aged 56, was admitted as my patient on the evening of Sunday, November 6th, suffering from strangulated hernia on the right side. He was a small and rather fat man, a shoemaker by trade, and long the subject of hernia. On this occasion, it had been down about eighteen hours; but never before had it attained the same size. He was a good deal sunken, and distressed by the constant vomiting. The tumour was very tense and tender, and of large size, being twenty inches in circumference, and eighteen inches longitudinally; that is, measuring from the groin over the prominent part, and back to the junction with the body. There was very distinct fluctuation to be discovered, the fluid occupying nearly all the scrotum; and, as in hydrocele, but one testicle could be found.

I gave him some chloroform, according to our custom, intending to try the taxis whilst he was insensible; for he had become very tender, from the tightness of the stricture and manipulations he had been already subject to. He took two drachms of chloroform, and became insensible; when I tried the taxis, but in vain. He then became so weak and collapsed, and almost pulseless, that all chloroform was discontinued, and I was afraid to invert him as I had intended. I punctured the sac with a grooved needle and hydrocele-trocar, and removed about half a pint of serum, without altering the state of affairs. I therefore operated, making a moderate incision. There was a great depth of fat; but all was accomplished most satisfactorily. I found the stricture at the external ring, firm and round like a whipcord; and I divided it without opening the sac. The intestine went back at once.

All this time, the patient had been cold and collapsed, and almost pulseless, but quite conscious; and from this state he never recovered.

I gave him warm brandy and water; and external warmth was applied; and he had a little opium.

The next day, his general condition was the same; but his bowels had been freely moved, and he expressed himself as feeling better, and recovering. During this day, he had stimulus and support, and, until the evening, that he was mending; whilst his skin had the cold feel of that of a dying man, and his pulse could scarcely be felt. The next day, he died.

**POST MORTEM EXAMINATION.** The body was examined the following day. There was a thickness of an inch and a half of fat over the abdomen. Dissection proved to be, as I had diagnosed during life, a large congenital scrotal hernia. A part of the not yet had slipped down again into the scrotum, there very easily withdrawn, for the opening was this enormous. Eight feet of the ileum, with the corresponding part of the mesentery, were of a dark

blue hue, but quite firm, and of the usual thickness. Without any trace of disorganisation or inflammation, and without the hard contraction at the fund of the sound and damaged parts sometimes

[Dr. Case cases. There was no effusion of lymph works on.

or serum, and no adhesion of the contiguous coils of intestine. The interior of the dark portion of the gut was very black, as if blood had been effused into the mucous membrane. His lungs were healthy. The heart was much loaded with fat upon the outside. The left ventricle was thick and healthy. The walls of the right ventricle were thin and of a healthy colour in the greater part of their extent; but near the apex, perhaps for the space of an inch, the tissue was converted into fat. The lines of the direction of the muscular fibres were perceptible, and the microscope showed the whole to be fat.

**REMARKS.** I think this case worthy of the attention of the Society for two reasons; viz., the hernia itself, and its fatal issue.

Strangulated congenital hernia in the adult is a rare condition, and is especially so when the tumour attains so large a size. Mr. Lawrence says that the stricture is generally in the neck of the sac. In this case, the stricture was undoubtedly formed by the tendon of the external oblique; and, as in the only other case of strangulated congenital hernia I have operated on, was extremely tight. In another fatal case, I found an equal length of intestine in the hernia.

The question of the fatal result is of more practical importance. The operation was quickly performed, and was as satisfactory as could be; and, although I cannot say in direct terms that the patient died from the chloroform, it is my belief that the collapse into which he fell while taking the chloroform took away all his power of rallying. The case bears on the discussion of our last meeting; viz., the safety or otherwise of chloroform. We have here a patient with a condition of heart not discoverable during life, but likely to cause fatal syncope in the event of chloroform being used; the subject of a very severe disease and operation dying within two days, without the slightest reaction or attempt at repair.

It is probable that the actual state was a paralysis of a very feeble heart.

**QUACKERY ABROAD.** A great type of social ignorance flourishes marvellously in Germany—the quack doctor. With us he works furtively among the very humblest social elements. Those who never hear of him otherwise will be surprised to find how he plasters the walls of Liverpool and the manufacturing towns. But in Germany he is great and eminent. I found him with a newly started project, which was getting a great run—*jichte-nadel Anstalt*, or Fire-needle Institution. The ministering priest of such a temple doses you with a concoction of fire-needles, and bathes you in the same, performing certain other incantations. In a country covered with dense pine-forests, his stock in trade is large enough, should his dupes prove sufficiently numerous. Like most people rurally inclined, I delight in the aroma of pine-woods on a sunny day; but the hot breath from the cauldrons of the Anstalt, as I passed the door, felt sickening. You are told that it cures every disease; and you are not only requested, but perhaps compelled, to submit to this doctrine. I knew of one instance where a very sick lady had fallen into such hands. Her family found that the practitioner, being a medicine Rath—sometimes so pronounced as to sound like medicine Rat—could not only carry out his own nostrums, but could put down all competition with them, having the medical command of the district, which he perambulated with uniform and epaulets; and he would have undoubtedly proceeded deliberately with the slaughter of the patient, had she not, at considerable risk, been removed out of his way. (Blackwood.)



## Reviews and Notices.

A SYSTEM OF SURGERY. THEORETICAL AND PRACTICAL. IN TREATISES BY VARIOUS AUTHORS. Edited by T. HOLMES, M.A. Cantab., Assistant-Surgeon to St. George's Hospital and to the Hospital for Sick Children. In Four Volumes. Volume the Fourth. Pp. 1079. London: 1864.

[Concluded from page 707.]

DISEASES of the Urinary Organs have been most appropriately entrusted to Mr. HENRY THOMPSON; who describes briefly Diseases of the Kidneys and Ureters, and more fully, the Diseases of the Bladder, Prostate, and Urethra.

In speaking of Paralysis of the Bladder, Mr. Thompson observes that this term is often wrongly applied to cases of atony from distension in consequence of obstruction to the flow of urine. True paralysis of the bladder depends on an impairment of the nervous supply; it may be by cerebral or spinal lesion, by excesses, by reflex irritation, etc. Permanent paralysis has never been found by Mr. Thompson to be traceable to an over-dose of belladonna; although it has been described as arising from this cause. In atony from over-distension, in consequence of obstruction, or of long retention of urine, the muscular fibres of the bladder simply lose their power in consequence of being over-stretched.

In his remarks on the Treatment of Stricture, Mr. Thompson speaks very favourably of the plan of rupture brought into practice by Mr. Holt. He says he has repeatedly verified the fact that an old stricture may be dilated up to a certain moderate degree, beyond which the slightest advance produces severe constitutional disturbance. The force employed in the old plan of driving a large conical bougie through the stricture "pushes the stricture down the canal, loosens its cellular connections, and infallibly produces inflammation and fever." On the other hand, the same stricture may, without producing such results, be ruptured by Mr. Holt's instrument, or distended according to a method adopted by Mr. Thompson, of using an instrument which distends the stricture alone up to a calibre of 14 or 16 of the catheter scale.

"I do not hesitate to say, that many of the cases which have hitherto resisted dilatation may be successfully dealt with by that method, whether applied in his (Mr. Holt's) manner, or by my own. The cases in which these methods appear most likely to be valuable are those in which the morbid material constituting the stricture does not form too thick or too dense a mass to be entirely ruptured. Where the stricture forms a large and hard nodule, it may, perhaps, be better to divide it with a cutting instrument. For many, however, of the cases which have been hitherto so treated, I believe the plans in question offer considerable advantages. To rupture a stricture appears at first sight a harsh and rough proceeding; but a careful and unprejudiced examination of the results on a large scale, and some personal practice of it, has convinced me that it deserves the character accorded to it here." (P. 399.)

The plan which Mr. Thompson prefers is that of distension of the stricture by means of an instrument

consisting of two steel rods, which, by turning a screw, are made to diverge from each other so as to form a spindle-shaped figure opposite the stricture. The application is made very slowly, so as to produce as little rupture as possible, while the tendency of the stricture to contract is overcome.

In introducing the subject of External Urethrotomy, Mr. Thompson gives an interesting sketch of the history of the proceeding. He would restrict the term "external division" to the operation devised by Mr. Syme; while the use of the term "perineal section" should be limited to the well known proceeding of older date, performed in connexion with strictures which have been found impervious to the catheter.

The author speaks of Mr. Syme's operation as producing excellent results in exceptionally obstinate cases; and says "I have observed such results in my own practice for cases which, I believe, could not have been materially benefited by any other proceeding." As to the mortality after the operation, Mr. Thompson does not consider it large, especially when it is considered what unfavourable subjects selected bad cases of stricture generally are. In 219 carefully collected cases, there was a mortality of between six and seven per cent., mostly from pyæmia.

In the treatment of Retention of Urine, Mr. Thompson holds that the choice of operation depends on the solution of certain questions regarding the patient. If his condition be such as to compel us to afford him immediate relief, without regard to ulterior results, then, unless the distended urethra can be felt in the perineum, puncture by the rectum is to be preferred, unless the prostate be in the way. But if it be likely that the patient will require to wear a cannula for a considerable time after the operation, then he prefers the suprapubic method. In rare cases, where distension of the urethra may be perceived in the perineum, a lancet or sharp-pointed bistoury may be employed, and a female catheter introduced; "or, if the powers of the patient are good, and the condition of the parts is natural, perineal section may be employed."

Mr. ALFRED POLAND contributes the article on Urinary Calculi and Lithotomy. He gives first, as is usual with authors on this subject, an account of the physical and chemical characters of calculi; regarding which we will only say that it is drawn up with great care and completeness.

The question of the Mortality after Lithotomy is very fully investigated. Adopting a table, of Mr. H. Thompson's, and slightly modifying his arrangement, Mr. Poland arrives at the following result. (We condense his table somewhat.)

| Ages.          | Cases.    | Deaths.  | Proportion. |
|----------------|-----------|----------|-------------|
| 1 to 11.....   | 850.....  | 49 about | 1 in 17     |
| 12 to 16 ..... | 178.....  | 19 ..    | 1 in 9      |
| 17 to 20 ..... | 132.....  | 22 ..    | 1 in 6      |
| 20 to 48 ..... | 175.....  | 24 ..    | 1 in 7      |
| 49 to 70 ..... | 124.....  | 103 ..   | 1 in 1      |
| 71 to 81 ..... | 38.....   | 12 ..    | 1 in 3      |
|                | 1827..... | 229 ..   | 1 in 8      |

To this Mr. Poland appends a table drawn up by Dr. G. Williams, the house-surgeon of the General and Norwich Hospital, during a period of 37 years ending December 1862. We give the following result. (We condense his table somewhat.)

| Age.           | Operations. | Deaths. | Proportion. |
|----------------|-------------|---------|-------------|
| 1 to 20 .....  | 455.....    | 34..... | 1 in 13.38  |
| 20 to 40 ..... | 119.....    | 8.....  | 1 in 14.87  |
| 40 to 60 ..... | 190.....    | 35..... | 1 in 5.42   |
| 60 to 80 ..... | 146.....    | 41..... | 1 in 3.56   |
|                | 910         | 118     | 1 in 7.71   |

Of these cases, 869 were males, of whom 811 were operated on by the lateral and 41 by the median section—the deaths being respectively 105 and 11; 17 were lithotriised; and 41 were females, of whom 2 died.

As to the rate of mortality, Mr. Poland observes that, although its comparison with the age of the patient seems the most rational and practical course, even this is open to the objection that a large stone may have existed for some time, and may thus influence unfavourably the result of the operation. But certainly, as a general rule, the mortality increases with the age; although, in the tables of Mr. Thompson and Mr. C. Williams, there are some remarkable variations. Thus, in Mr. Thompson's table, while the mortality in the periods, 12-16, 17-20, and 21-29, in 178, 76, and 86 cases, was respectively 1 in 9½, 1 in 7, and 1 in 8, that of the age 30-38 (75 cases) falls to 1 in 10½; while that of the next period (39-48) rises to 1 in 6. Again, in Mr. Williams's table, the mortality of 328 cases from 1 to 10 years was 1 in 14.9; that of 55 cases from 10 to 14, 1 in 27.5; that of 72 cases from 14 to 20 rose to 1 in 7.2; while that of 111 cases from 20 to 40 fell again to 1 in 14.87; after which it rose to 1 in 5.27, ending in 1 in 3.

Mr. Williams has also furnished a table of 44 cases of Median Lithotomy performed in the Norwich Hospital, giving the age, result, duration of treatment, number of calculi, their dimensions, weight, etc. Comparing these 44 cases of median lithotomy with the last 44 cases of lateral lithotomy in the Norfolk and Norwich Hospital, the following results are arrived at. From the lateral operation, there were 2 deaths, which occurred among 14 patients aged from 50 to 60 and from 70 to 80. From median lithotomy, there were 11 deaths; 1 in 9 cases under 5 years of age; 1 in 3 cases between 30 and 40; 2 in 5 cases between 50 and 60; and 7 in 15 cases between 60 and 70. The average duration of treatment after operation in the lateral lithotomy cases, was thirty-seven days; after median lithotomy, thirty days—that is, in the cases which recovered.

Mr. Poland's opinion of median lithotomy is, that it may be performed where the stone is small; but that, while recovery is ordinarily expected in children whatever operation be performed, none of the recent improvements seem to supply what is wanted—the *reducing* of the mortality after the operation in *adults*. We think certainly that other influences *fatal* be looked to, than the mode of operating or *case* skill of the operator, essential though these are.

not CHARLES HAWKINS furnishes a very complete theoretical paper on Lithotomy, an operation to this he has paid considerable attention. Among *death* commendations which he makes are; that the

In *typhus* should, especially if the bladder be irritable, the stone *once* only in the first operation; that, in the *from* *Dr.* *patient* can bear without great inconvenience, *works* obviate the necessity of very frequent repeti-

tions of the proceeding; that no attempt should be made to remove fragments of calculus by instruments, but that they should be left to be washed out by the urine; and that, in performing lithotomy, the rule should be invariably followed, *to introduce an instrument into the bladder as few times as possible*.

Mr. Hawkins, in comparing lithotomy with lithotripsy, shews a strong preference—and with evident reason—for the latter operation; and expresses his concurrence in the opinion of Sir Benjamin Brodie.

"My own experience" (says Sir B. Brodie) "has certainly led me to the conclusion that lithotripsy, if *prudently and carefully performed, with due attention to minute circumstances*, is liable to smaller objections than almost any other of the capital operations of surgery. The cases, indeed, to which it is not applicable are very few indeed, and they are chiefly those in which, from the calculus having attained an unusual size, the danger and difficulty of lithotomy are so great that no surgeon would willingly, nor otherwise than as a matter of duty, undertake it." (P. 490.)

An article on Surgical Diseases of Women follows, from the pen of Mr. JONATHAN HUTCHINSON. It is, as the author intimates, necessarily brief and limited in its range: but what there is, bears the general sound character which pervades Mr. Hutchinson's contributions to surgery. The subjects treated of are:—Urethral Hæmorrhoids; Malformations of the Vagina or Uterus; Uterine Polypus; Uterine Fibroid Tumours (in reference to Surgical Treatment); Malignant Disease of the Cervix Uteri; Malignant Disease of the External Genitals; Surgical Measures in Cases of Extra-uterine Pregnancy; Ruptured Perinæum and its consequences; Organic Diseases of the Ovary, and their Surgical Treatment; and Vaginal Fistula.

At page 505, Mr. Hutchinson gives a series of conclusions at which he has arrived regarding the Enucleation of Fibroid Tumours of the Uterus. They are, he says, the result of careful study: but some of them may be modified by further experience. He regards interference with interstitial tumours as a dangerous operation, and not to be performed unless under very urgent or favourable conditions. A tumour of moderate size, partially extended, should be at once removed; and the operation is warrantable even when the tumour is still embedded, if life be threatened by hæmorrhage. Primary enucleation is to be preferred, except when the tumour is very large or is firmly united to the capsule. At the first operation, the surgeon should endeavour to free the tumour from its cyst as much as possible; in this way, primary enucleation may sometimes be effected when the secondary plan had been thought necessary. In primary enucleations, the after-treatment should consist in the use of opiates, stimuli and nutritious diet, and other means of sustaining strength. In secondary enucleations, ergot should be given, at the same time that the patient's strength is supported, and discharges and sloughs removed. In great exhaustion and threatened pelvic inflammation, the internal use of turpentine is of much value. The result of a successful operation for enucleation, Mr. Hutchinson regards as being likely to be favourable.

In the section in Ovariectomy, Mr. Hutchinson puts forth, regarding the advantages of the operation as shewn by statistics, an argument which is not often taken into account in estimating the value of



surgical proceedings. He objects to comparing ovariectomy to lithotomy, amputation, etc., and says that it must be judged on its own merits. "Let it be admitted," he says, "that the object of surgery is the increase of the sum of human life, and the alleviation of its miseries. Whether this life is enjoyed by many individuals over short periods, or by few over long ones, is not of moment, if the sum of it be increased." Then he goes on to institute a comparison between 100 patients submitted to ovariectomy and of whom one-half recover and are restored to health; and 100 other ovarian disease patients, not operated on, who live a life of suffering having an average duration of three and a half years.

“ The average age at which women submit to ovariectomy is 35; and the average expectation of life at this period is 30 years. The 50 patients who recovered might, therefore, expect to enjoy a total of 1500 years of health, which compares very favourably with the 350 years of illness which the whole 100 would have had to endure, if not operated on. If it be objected, that it is not just to one person to deprive her of four years of life in order that another may live 30, the reply is, that this is a matter for the patient to consider, and not the surgeon.” (P. 535.)

We do not see how an objection to ovariectomy could be fairly put in the form in which Mr. Hutchinson has supposed it. No surgeon would expose a patient to the risk of deprivation of four years of life *in order that* another might live thirty years; that is not his object. He puts before his patient the certainty of a short life of misery, and the probability of a long life of health; and, as Mr. Hutchinson says, "all that the honest surgeon is responsible for is, that the prizes which he offers to the competition of his clients shall be *bonâ fide*, and in sum of value far exceeding the deposits which he exacts."

Dr. G. M. HUMPHRY contributes an article on Diseases of Male Organs of Generation. In it, he describes the various Surgical Diseases of the Testis Vesiculæ Seminales, Scrotum, and Penis. Of the affections of the Vesiculæ Seminales, he says that they have not hitherto received from surgeons that attention which they deserve; "for these bodies are not uncommonly diseased in company with the testicles or independently of them; and such diseases may induce or aggravate inflammation of the bladder, and be productive of other ill effects." They sometimes become secondarily inflamed in gonorrhœa; are not unfrequently the seat of scrofulous disease; and Dr. Humphry has in several cases "known a chronic enlargement of the vesiculæ seminales analogous to the affection of the prostate in elderly persons, and attended with corresponding symptoms of irritation of the bladder" The disease of the vesiculæ seminales is to be detected by rectal exploration.

Mr. HENRY LEE and Dr. J. A. MARSTON conjointly furnish an article on Gonorrhœa. That it has been written by men of such experience, is sufficient warrant of its accuracy and value.

Mr. JOHN BIRKETT writes the next article, on Diseases of the Breast—a subject on which he has long enjoyed a high reputation.

The next article, Diseases of the Thyroid Gland, is by Mr. HOLMES COOKE, who describes Bronchecle, Inflammation, and Cancer. He adopts the opinion of Rokitsansky, that,

"If we except serous, fibrous, cartilaginous, and bone-like productions, all other new formations in

the Thyroid Gland are extremely rare. Tubercle is scarcely ever seen; and cancer in its medullary form is in the highest degree exceptional." (P. 708.)

The description of Diseases of the Skin has been placed in the hands of three writers. Drs. JENNER and HILLIER furnish the first part, on General or Constitutional Affections, including under this head the affections commonly recognised as diseases of the skin, together with Plica Polonica.

MR. THOMAS SMITH then writes on Local or Surgical Affections of the Skin and its Appendages; including under this head Corns, Bunions, Warts, Horns, Boil, Carbuncle, Malignant Pustule or Charbon, Chilblain, and Diseases of the Nails. On what principle Boils, Carbuncles, and Chilblains, are considered to be local rather than constitutional affections, we do not see.

Here ends the matter proper of the *System of Surgery*; and the Appendix begins with an article on Surgical Diseases of Childhood, by Mr. HOLMES, Mr. BRODHURST, and Mr. SHAW. The object of the authors is not to give a full account of the subject, but to notice such matters as have not been treated of in other portions of the work. When subjects have been thus already disposed of, references are given to the parts of the work in which their descriptions are to be found.

Mr. Holmes writes on Operations in Childhood; and on Malformations—including attached foetus, congenital sacral tumour; congenital malformation of the face; spina bifida; imperforate rectum; malformations of the umbilicus; hermaphroditism; malformation of skin; and malformation of limbs. Mr. Brodhurst writes on Congenital Dislocations and Fractures *in Utero*. Mr. Shaw supplies remarks on Congenital Tumours, Congenital and Infantile Syphilis, Infantile Paralysis, Gangrene, Leucorrhœa, Tumours of the Vagina, Rickets, Lateral Distortion of the Spine, and Pigeon-breast Deformity.

Next follows an article on Hectic and Traumatic Fever, and on the Treatment of Cases after Operation, by Mr. JOHN CROFT.

Dr. G. HARLEY writes on Apnoea; describing it according to the causes which produce it, of which he gives a very distinct classification at page 878.

Mr. GEORGE BUSK contributes concise but instructive articles on Parasites (animal and vegetable) and the Diseases which they produce; and also on Venomous Insects and Reptiles.

Mr. HOLMES writes on Surgical Diagnosis and Regional Surgery.

Sir RANALD MARTIN contributes a very important article on Hospitals. We regret much that for necessity of concluding this review precludes us, for the present at least, from doing more than mention the fact that such an article is in the work before us. The topics treated of are, the history of the institution of hospitals; site and construction, ventilation, light, and cubic space; hygiene of hospitals; nutrition; diet and cooking; nurses in military hospitals, and in civil hospitals; respective duties, relative position of nurses and orderlies; statistics of hospitals; mortality of hospitals; finance; and, in a separate section, on the subject of the future of hospitals.

The last chapter is one by Mr. HOLMES, on, 132; and Mr. J. C. WORDSWORTH, on the pri- 33; acting  
gical Instruments and Apparatus at present, 3; Dr. Gil-  
Thus has been completed, within a 1,249, 375;  
short time, Mr. Holmes's *System of Surg.* 192; Com-

cannot conclude without saying that very great credit is due both to him and to the writers who have contributed to the work, for having so well put together such a valuable mass of surgical knowledge. It adds very greatly to the value of the book, that in many instances the names attached to the articles are those of surgeons who are known to have given most careful attention to the subjects, and to have enjoyed special opportunities of becoming more or less thoroughly acquainted with them. We congratulate Mr. Holmes on so successful a completion of a task which, although one of pleasure, must also have been one of great and unremitting labour.

## British Medical Journal.

SATURDAY, DECEMBER 31st, 1864.

### OUR PROFESSIONAL BRETHREN.

LIVERPOOL has again been the scene of a trial not unlike the one brought against the surgeons of the Northern Hospital for alleged malpraxis. On this occasion, however, it involved not the surgical staff of a public institution, but the reputation of a highly educated and respected practitioner. Again have we another instance of a surgeon coming forward with an unqualified "bone-setter" to assist in subjecting a medical brother to a cruel persecution.

The facts are briefly these. A Mrs. Pryce fell down stairs, receiving a severe injury of the right forearm. Mr. Essex Bowen, surgeon to the Birkenhead Hospital, was sent for, and at once diagnosed a simple fracture of both bones of the forearm, attended with a very large amount of injury to the soft parts. The limb was at once placed in position, and retained semi-prone by means of a splint. A few days after the injury, much inflammation took place; and eventually a deep slough formed on the inner and middle part of the forearm. The inflammatory action delayed union of the fractured bones. Five weeks after the injury, and whilst the slough was coming away, Mrs. Pryce placed herself under the care of Mr. Evan Thomas, a bone-setter of Liverpool, and his son, Mr. Evan Thomas, jun., of R.C.S. England; under whose care she has since remained.

The evidence of the father and son at the trial first, to show that the condition of the arm was due to improper treatment on the part of the defendant. Then Evan Thomas informed the court that he did not know Latin; and, when asked which was the ulna, he very candidly replied, "I don't know." This was a plain question, and I'll answer you."

In this sort, it was clear, would not carry weight. A professional man was, therefore, retained to back it. Liverpool was canvassed; but from every quarter. Manchester was then appealed to;

and sends a representative—Mr. Lund, surgeon (as he states) of the Manchester Royal Infirmary, and in practice since 1847.

The plaintiff stated that, after her arm was set, the palm of the hand looked directly downwards; and the inference drawn from this was, that it was set, not in the ordinary *semi-prone* position, but in the *prone*. Now, this was clearly a mistake; no doubt arising from the fact that, when the arm is raised for the purpose of "setting", the palm looks directly downwards, but, immediately the arm is brought to the usual position at the side, the thumb points directly upwards. Mr. Lund says:

"If Mrs. Pryce's description of the position is correct, I am of opinion that it was improperly placed. The proper position of the arm was with the palm of the hand uppermost; and it was known amongst medical men that the reverse position was wrong. The fracture of Mrs. Pryce's arm was a simple fracture; and, if the arm was placed with the palm of the hand downwards, the circulation of the soft parts of the arm would be interfered with, and there would also be the greatest risk of the bones getting 'glued' or sticking together. An interference with the circulation in the soft parts would end in inflammation, and that was one reason why it was a bad practice to put the arm 'prone'. Examined Mrs. Pryce's arm on Monday, the 12th; and was of opinion that the two bones had grown or stuck together, so that they would not move over each other; and that they would prevent Mrs. Pryce turning the wrist. Agreed with Mr. Evan Thomas, jun., that that was caused by the suppurating of the tendons and the 'glueing' of the bones together. Cross-examination: Have known the *semiprone*—the thumb uppermost—frequently used by skilled medical men; but could not call to his recollection any case in which the hand had been placed prone, the palm downwards. As far as pain was concerned, it would be more irksome to have the palm upwards than downwards. In all cases, there must be some rupture of the muscle, varying according to the character of the fracture. In this case, the swelling was not of that character as to lead him to think there had been a rupture of one of the large muscles. He said that, because he had not heard of any interruption of the pulsation. The symptoms of a large vessel being injured would show themselves in twenty-four hours; and, if they had so shown themselves, it certainly would not be right to leave the arm with the palm of the hand downwards for nine days. It would not be right in that case to leave it in the *semiprone* position. It would be too late to turn it after nine days; the consequences of the malposition would have resulted in that time."

Mr. Bowen was then called; and described everything that occurred in what Mr. Justice Blackburn called a clear and intelligible manner. He showed that he was most solicitous for his patient's welfare. He attributed the non-union of the fracture to the mischief which had ensued from the injury that had caused the fracture; and said that at the conclusion of his attendance there was nothing inconsistent with future usefulness under ordinary surgical skill. Mr. Bickersteth "believed he should have acted throughout the case in the same manner as Mr. Bowen did." Mr. Long and Mr. Hakes said the



same; and, in addition, there were numerous other eminent surgeons in court prepared to add their testimony, should it be required, in favour of Mr. Bowen. Mr. South, of St. Thomas's, was of opinion that "the present condition of the arm had arisen from sloughing caused by the great injuries which had been sustained, and was owing to no want of skill in the treatment." The judge having summed up, the jury, after a few minutes' consultation, returned a verdict for the defendant; Mr. Bowen being congratulated by a host of professional brethren, who were waiting to hear the termination.

Here, then, a jury decides that Mr. Bowen had done, and well done, his duty. Why, then, was he prosecuted in a court of law? We may safely assert that, except for the countenance and support of his professional brother, Mr. Lund, the action could hardly have hung together even for a moment. Mr. Lund accepts statements made by an unprofessional witness, Mrs. Pryce, sides with a "bone-setter," and so aids not only in the attempt to inflict a pecuniary damage on a brother, but also to deprive him of his professional reputation. Mr. Lund is without excuse. The defendant is a highly educated Fellow of the College by examination, a Crimean hero, and a surgeon of considerable local eminence; and his attention to the case was never called into question. If he did not use skill, as Mr. Justice Blackburn said, he must have acted against his better judgment; and why should he have done so? If medical men did not come forward on these occasions to assist dissatisfied patients in court, there would be an end of such persecutions. Liverpool, we say to its credit, refused to a man to have anything to do with the support of such an action. In cases of this kind, the profession has two duties to perform:—one is to comfort the injured brother; and the other, to reprobate the conduct of those who by their presence give unjust and unwarrantable support to such actions.

### THE COLLEGE OF PHYSICIANS.

THE Committee appointed by the College of Physicians to inquire into the condition of the Army Medical Service, have applied for and obtained permission from the College to include in their inquiry the condition of the Navy Medical Service.

In consequence of great dissatisfaction which was expressed at the last annual election of Fellows, the Council were requested by the College to consider whether some better mode than the present of election of Fellows could not be devised. The Council, in reply, report that, after mature consideration, and after taking counsel's opinion as to their legal power in the case, they think no change desirable. They also greatly praise themselves for the extreme and scrupulous care which they have always exercised in the selection of Fellows recommended by

them to the College for election. The College certainly, on the last annual election, did not give the Council all the credit they assume to themselves. If no better method can be found, of course the present must be accepted; but we are not bound to consider it perfection.

The Medical Council shows signs of its usual vitality, but none of vigour. It has addressed communications to the College in the old strain, making inquiries, and seeking information on subjects about which it already has, or ought to have, the very fullest information. It also asks the opinion of the College upon matters which, if it were really worthy of its name, worthy of its salt, worthy of its origin, and, we may add, did its duty, it would long ago have itself settled, and long ago have enforced as laws upon the licensing boards of the country. Even one of its simplest and yet very important functions—providing for a proper registration of students—is performed in a most slovenly manner. In fact, the Medical Council very coolly asks the licensing bodies to do for it gratuitously this very work of registration, for which it has received such enormous sums of money from the profession, and for which the profession still yearly bleeds so freely.

The College of Physicians, at a late meeting, decided that in future the Harveian Oration might be delivered in English or in Latin, at the option of the orator; and that the orator should be appointed by the President. Accordingly, the President has appointed the Regius Professor of Physic of Oxford, Dr. Acland, orator for the ensuing year. The Croonian Lectures will be delivered by Dr. Peacock; the Lumleian, by Dr. Handfield Jones; and the Gullstonian, by Dr. E. Smith. Dr. Odling will also give an extra course of six lectures. The President may, moreover, at his pleasure, permit other fitter lecturers to enlighten the Fellows during the ensuing year.

The Leprosy Committee have not yet brought their labours to a close. They have, however, already accomplished a most excellent history of the disease of which a certain number of copies have been sent off at the expense of the Government, at present, private circulation only. As the President has said, the work, when completed, will doubtless, be the authority on the subject.

The Government appears to be, at the present time, besieged by infallible cures of diseases; to their remedies. At the last meeting of the College of Physicians, no less than "three great orators; Government communicated with the Colonies, 100; these things. Lord Palmerston forwarded, 132; consideration of the Fellows, a box containing 133; acting pots of pomade, having, of course, some; Dr. Gibb's virtues. Earl Russell sent a communication, 249, 375; by him from Manila (where cholera has been, 192; Com- fearfully), to the effect that, of all :

chlorodyne was the most effective. But the remedy was scarce and dear. A grand opening, therefore, for the manufacturer of the article! The noble lord, we may presume, will have given the article a lift. Next comes Earl de Grey, who sends his compliments, and hopes the Council will inquire into Warburg's febrifuge tincture, of which he has heard great things. To him Dr. Alderson, as Pro-president, had already sent an appropriate answer, telling him that the College took no cognisance of unknown remedies. Our readers have, no doubt, often heard of these Warburg's drops. They probably contain beberine; and have been already extensively tried in India, and found not to be as efficacious as quinine.

## Association Intelligence.

### WEST SOMERSET BRANCH.

A QUARTERLY meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Wednesday, January 11th, 1865, at 7 P.M.

Notice of papers or cases to be communicated should be sent to the Honorary Secretary previous to the meeting.

W. M. KELLY, M.D.,

Honorary Secretary.

Taunton, December 10th, 1864.

## Correspondence.

### INTRAOCULAR MYOTOMY.

LETTER FROM JAMES VOSE SOLOMON, ESQ.

SIR,—To two of the replies of the five questions to which I gave categorical answers in my letter in the JOURNAL of October 22nd, Mr. Hancock has raised no objections which are intended to invalidate my accuracy. He admits that intraocular myotomy embodies all the principles of a subcutaneous myotomy; that it was devised by me, and is insusceptible of being proved to be a similar procedure to "division of the ciliary muscle". He admits also that in iridectomy, as performed by Dr. von Gräfe for the relief of glaucoma, the ciliary muscle is cut transversely and in front of the iris. It would have been only ingenuous on the part of Mr. Hancock, had he stated it was Dr. von Gräfe who first propounded the hypothesis that the relaxation of the ciliary muscle might possibly have much to do with the good which iridectomy effected in glaucoma. A careful study of Mr. Hancock's papers in the *Lancet* has convinced me that it was upon this suggestion of Von Gräfe's, and an intimate knowledge of Desmarres's practice of puncturing the sclerotic in glaucoma, that he built up his theory of spasm of the ciliary muscle, and its cure by cutting in the direction of its principal fibres. In commenting, in his letter to you, upon Desmarres's practice, and quoting from the first edition of his ophthalmic treatise, Mr. Hancock has not attempted to refute the statements contained in my paper in this JOURNAL (p. 451, vol. i, 1863). I there notice that Desmarres treated with success the acute glaucoma which sometimes follows the depression of cataract, and which proves unamenable to ordinary antiphlogistics—by plunging a Wenzel's cataract-knife into the outer and lower part of the globe, at three millimètres or one-tenth of an inch from the rim of the cornea. Such an incision, I contend—and Mr. Hancock has adduced no evidence to the contrary—cuts the ciliary muscle near to its insertion into the choroid, which insertion is distant upwards of four millimètres from the external rim of the cornea. Four millimètres measure less than one-seventh, and not almost a quarter of an inch, as asserted by Mr. Hancock, who calls upon me to prove "my point by precision and facts, and not by reckless assertion".

With regard to the direction of the incision, there is no room for disputation, as in each of the woodcuts numbered 48, 49, and 50, pages 579, 580, it is delineated as commencing at one-tenth of an inch, and as radiating rather obliquely from the cornea—taking, in fact, as asserted by me, the course of the radial fibres of the ciliary muscle. Indeed, if the line in the woodcut, No. 49, which represents the

THE *lex talionis*, in a moral sense, has been well played out against Mr. Crossley of Leicester. Mr. Crossley, some three years ago, appeared as a witness in a county court affair, to maintain that the charge of Mr. Jackson, a brother practitioner, for services rendered to a Mr. Gee, were excessive; and his evidence so far prevailed that the charge was reduced from £15 to £12. But years revolve; and now Mr. Crossley himself appears in a county court to defend his own moderate charges; and, we are happy to say, to defend them successfully. A correspondent gives an outline of the case. We only refer to it now to note the moral of the tale, which of itself speaks an eloquent lesson. Glad are we to note that on this occasion medical brethren appeared in the witness-box, not to object to, but to support, Mr. Crossley's claim. This case showed also painfully before the public the unsatisfactory condition of our system of medical charges. The county court judge was clearly confused by what he heard. His remarks, on summing up the case, are worthy of note.

"Some remarks had been made as to the plaintiff acting in the two capacities of surgeon and apothecary; but it was well known that general practitioners dispensed their own medicines. There were no gentlemen, like Mr. Benfield, who charged only for their visits. There was another class of practitioners, who paid themselves in the most unsatisfactory of all ways—by administering medicine, and so being for the time which they were occupied. It should be remembered, however, that a surgeon must be occupied the early portion of his life in reading, and hospital practice; and that he looked to the amount which was paid him as payment for his professional skill. In the case before them, Mr. Crossley made his charge for attendance in a lump sum; he had not entered each attendance in his case-book; did not quite understand why surgeons not charge for visits in surgical and not in medical cases."

In this case, a woman, 47 years old, came into Dr. Mosler's dispensary with diabetes. It turned out that her father, in the last two of her sisters, had died of the same from diabetes. [Dr. Mosler, three weeks later, a son of this woman, 15 years old, was found to have diabetic urine.]



sclerotic incision, be carried forward up to the edge of the cornea, the exact obliquity would be obtained which Mr. Hancock declares to be a distinctive feature of the method he claims to have originated.

In order to demonstrate this, I have had a tracing made by Mr. Ordway from the woodcut No. 49, p. 579, of Desmarres' first edition, and of Fig. 6, p. 32, of his second edition, Paris, 1855, five years before "division of the ciliary muscle" was introduced. The dotted lines have been added by me, to show the extent of the London modification of Parisian practice.



Fig. 49.



Fig. 6.

The instrument employed by Desmarres is a cataract-knife, or a grooved needle which no English surgeon would use; it may be seen at Weiss'.

Having proved, by reference to the anatomy of the ciliary muscle, that Desmarres was in the habit of dividing it for the relief of acute glaucoma, and that his incision was radial and slightly oblique, I will suppose, for the sake of argument, that there is an essential difference, as alleged by Mr. Hancock, in the direction in which the incisions are made; and then apply the same test to "division of the ciliary muscle," which the latter gentleman has laid down for judging of the originality of certain procedures which have been devised since 1859 for the relief eye-tension, and in which the muscle of the lens is cut. In the *Lancet* for August 9th, 1862, Mr. Hancock states that, whatever the direction of the incision, the principle is the same—"division of the ciliary muscle; and whether that object is attained by making the cut obliquely, as I have recommended, or straight, or along the curve of the cornea, it can make but little difference, so long as the muscle is divided, and the transparent cornea is not invaded." After this, in what relationship stands "division of the ciliary muscle" to the operations practised by Whyte and Desmarres, wherein the ciliary muscle was divided—in the one instance upwards of half a century, and in the other nearly twenty years, before the subject was taken up by Mr. Hancock?

Mr. Hancock ridicules the idea that the ciliary muscle (which is one-seventh of an inch in length) should be considered of sufficient size to be cut in more situations than one. He conceives that, for the performance of such a surgical feat, the muscle must "pervade all parts of the eye". I confess I should expect so to find it did—I believe, with him, "that not the least in importance of its functions is to exert an uniform action or influence over the several coats of the eye (cornea and sclerotic!), in their adaptation to the various foci necessary to the perfection of vision." (Vide a paper by Mr. Hancock in the *Ophthalmic Hospital Reports*, vol. iii, p. 14.)

The hypothesis that the ciliary ligament, by its contraction, aids in elongating the eyeball during optical accommodation, was rejected by Porterfield in 1759. Such opinion I have never entertained, but, on the contrary, in my earliest writings on intra-ocular myotomy, have spoken of the ciliary as the muscle of the lens, for which function it appears, by its extreme delicacy of structure, feebleness, and situation, to be admirably adapted.

The object with which Desmarres and Mr. Hancock operated in cases of glaucoma, whether originating idiopathically or in the vascular disturbance inci-

dent to couching, or the breaking up of a cataract (*broiement*), was identical; viz., to save an eye threatened with destruction. In Desmarres's operation and its London modification, pains were taken to get a copious discharge of fluid. With the theory on which these measures are alleged to be based, practical surgeons and physiologists feel no concern, unless the accuracy of such theory can be attested by experiment, well founded analogy, or an appeal to some recognised physiological law.

When, however, Mr. Hancock concedes, as he has done, that Desmarres cured cases of glaucomatous choroiditis, or acute internal ophthalmia attended by severe pain, great constitutional disturbance, and which resisted medical treatment, by drawing off aqueous humour through a wound in the sclerotic, and this without division of the ciliary muscle,—he makes an admission which is fatal to the theory on which "division of the ciliary muscle" is propounded by him as a cure of glaucoma. He admits that section of the muscle had nothing whatever to do with the results which he (Mr. Hancock) has published. In this view I entirely concur; and it is one at which every surgeon who has practically investigated the subject has arrived. Of this number, I may particularise Bowman, Follin, Hulke, Nunneley, and Power.

Nevertheless, it would be interesting if we were informed by Mr. Hancock whence the aqueous humour was obtained in the cases of glaucomatous choroiditis occurring after the solution of a cataract, an operation in which the vitreous humour is not broken up (Desmarres states he has treated many such complications by paracentesis of the sclera, page 597), and in idiopathic glaucoma—*unless it was by a section which penetrated the posterior aqueous chamber*. And if that cavity be penetrated, by what means the ciliary muscle escaped division. Does the *posterior aqueous chamber* "pervade all parts of the eye"?

As to the Paris letter bearing the date of March 9th, 1860, it simply shows that Dr. Desmarres, like many others, myself included, was unable to comprehend how an incision in the course of the principal fibres of the ciliary muscles could relieve spasm in an analogous manner to the cure of spasm of the sphincter ani, by a longitudinal incision of its circular fibres.

Be this as it may, Desmarres put "division of the ciliary muscle" to the test of experience; and, at the end of two years, Mr. Bowman (August 1862) announces his name as being in the ranks of iridec-tomists. What more convincing proof could be adduced, that "division of the ciliary muscle" and paracentesis of the sclerotic were considered in Paris to be agents equally impotent in the treatment of idiopathic glaucoma?

Mr. Hancock has called in question my statement that "with Dr. Whyte originated myotomy of the ciliary", on the ground that "he (Whyte) did for, know there was such a muscle in the eye; no surgeon any one else till the year 1847." I believe I shall find no difficulty in convincing Mr. Hancock that, 45; and his cotemporaries were not so ignorant; 550, imagines. Whyte wrote in 1802; and in 1773 Branch was published a work that continues to this day authority on optics, in which the muscularity of the ciliary ligament was distinctly taught. "An efficient cause (of optical accommodation), in Wales already demonstrated that this lies in the ligament; Metropoliare, which, being muscular, does by its contraction, 100; change the situation of the crystalline" (Porterfield, vol. ii, p. 16.) In another place, on 132; 450, he writes: "Nor are we to be surprised; acting many accurate anatomists, after a careful dissection of the process (ciliary ligament), they are compelled to affirm it to be muscular." (British Medical Journal, 1864, 192; Com.

Porterfield also treats of the effect upon optical accommodation of rigidity, spasm, and paralysis of the ciliary muscle.

Mr. Hancock concludes his letter by stating that I have "appropriated the merit of having originated myotomy of the ciliary muscle". I think, if he will examine my writings with calmness and in a dispassionate spirit, he will be convinced that it is to Whyte I ascribe precedence, and that I have earnestly endeavoured to do full justice also to himself and contemporary labourers in the same field of inquiry.

I am, etc., J. VOSÉ SOLOMON.

Birmingham, November 21st, 1864.

P.S. Circumstances over which I had but little control have prevented the earlier publication of this letter.

### CROSSLEY v. MORLEY.

LETTER FROM J. A. BOLTON, M.D.

SIR,—The *Leicester Advertiser* of to-day contains the report of a case, *Crossley v. Morley*, tried in the county court. Mr. Crossley is the gentleman who gave evidence in the case of *Jackson v. Gee*, reported in the *BRITISH MEDICAL JOURNAL* of 25th January 1862. On this case you published a leader which gave universal satisfaction to the profession in all parts of the kingdom. By a reference to our *JOURNAL* of the above date you will find as follows:—

"Mr. C. R. Crossley said he had examined the bill carefully." "It was not usual to charge for medicines and attendance at the same time." "Nor had he heard of the term 'consultation' being used except when two medical men consulted together." "Had examined the bill, and considered it to be exorbitant."

Neither the medical journals nor the profession concurred with Mr. Crossley in this view of the charges; nor could they justify the verdict founded on Mr. Crossley's evidence, which deprived Dr. Jackson of one-fifth of his "fair and moderate bill." Hear, then, Mr. Crossley in court again, but mark well, under different circumstances. He is now the wooer of the coy hand of "justice." He says:—"The items previous to the accident were for medicines and attendance; the charges were fair and reasonable." "He did not charge for visits in the first part of the account because it was a medical case." "He charged for medicine and attendance at the same time." "He remembered being examined as a witness about two years ago in the case of *Jackson v. Gee*." "He then said it was not usual to charge for medicine and attendance in medical cases at the same time; and said that two shillings and sixpence was the usual charge for medicine, and a shilling for ointment." He "had urged in the bill one shilling and sixpence for ointment, as they were large boxes." He "charged as a surgeon and as an apothecary in the bill." He "did book his visits in surgical cases." (Where he charges for them!) "In medical cases he entered his bill." (Where he does not charge for them!) "The ruling contrasted only a few of Mr. Crossley's arguments in the witness box, within a period of two days. I beg you will call upon him for further illustration of his views regarding the proper mode of attending and making out a medical or a surgical case." I also that you will fully express your own views on this case, which will thereby be infinitely valuable both to the profession and the public.

I am, etc.,

JOHN A. BOLTON, M.D.

In the *Leicester Advertiser* of 11th Dec. 1864, typhus leaders and letters on the case of *Jackson v. Morley* and our fellow-associates to the *Daily Telegraph* from 15th January to 10th February 1862. [Dr. Crossley's works o.]

### ASSISTANT-SURGEONS FOR INDIA.

SIR,—Why, let me ask your correspondent "D. I. G.," should I be guided by my feelings rather than my judgment? I have retired from the service, and am receiving the pension which I was promised when I entered it.

I do not "advise my younger brethren in the choice of a career." I only gave my opinion of the two services. Nor have I advised either; I merely wrote, "I still say to aspirants for the red jacket, choose the British service, etc."

"D. I. G." writes very positively as to the inability of the Indian Secretary to handle the question of relative rank; I only know that Her Majesty's Warrant of 13th January 1860, giving relative rank to the Indian medical service, emanated from the India Office, and was signed "C. Wood," as is this despatch, which in paragraph 33 refers to the Warrant, and directs *substantive* rank to be given to two grades. Surely if he has the power to do this, he has power to do the rest, for he must be well aware of the general feeling on this subject; and he must know that, until this point is satisfactorily settled, pay and pension will not induce men to go to India when they can go to any part of the world in the British service, instead of being transported to India for seventeen years, where I defy "D. I. G." "making a provision for his wife out of the liberal pay now allowed" (I doubt if "D. I. G." ever lived in India as a married man). How many years will it take an assistant-surgeon to repay himself his passage money to India? In the British service this is found. Does "D. I. G." forget that a man's wife and children may and will get sick, and must be sent home; and if the assistant-surgeon comes home sick, he only gets passage home, *not out again*; this he must find himself; while in the case of the British medical officer passage is found both ways (though it is seldom he has to return). And here I may inform "D. I. G." that what I have written refers to both services in India, arguing from the despatch; and I have no hesitation in saying that it brings into being a new service, totally distinct from the old, without any claim to advantages in previous despatches; for various paragraphs refer to officers *now* in the Indian medical service, and point out the bearing of the despatch on them. Hence I conclude that, as nothing is said of furlough pay to Europe, I should be sorry to trust the Indian Secretary in the event of being obliged to come home sick; and I maintain that all entering the service under this despatch will be bound by it, and cannot claim under prior orders, for you will observe the fatal words "prospective" and "in future" in this despatch.

I am not aware of having said anything against the pensions under the new rules. I only compared them with those under the old, and I fancy I proved that with our Medical Fund we were far better off under the Company; though £220 is a good pension after seventeen years, I do not think it is enough for transportation to India, when I get so much more under the old rules.

"D. I. G." writes of an increase of £250 to deputy-inspector-generals, and £300 to inspector-generals, after five years services in these ranks, as if every man was to attain these ranks. Surely this is not honest to our junior brethren. Why not say there are a few prizes in the new lottery (*one* inspector-general for Madras)? and even then they are not equivalent to the pension and Fund under the old rules, which gave after twenty-eight years £900 *versus* £756 after twenty-seven years under the new rules, not £806, as stated by "D. I. G."

"D. I. G." refers to stoppages under the old rules, if absent for *one day* from his charge. He cannot have



served in India, or he would know that *all* officers were entitled to thirty days leave in every half-year to count as service; and in the case of the staff (adjutants, quarter-masters, and medical officers) private arrangements must be made for their duty being done; thus Dr. A. did the duty of Dr. B. in March, and Dr. B. did the duty of Dr. A. in May or June, and neither suffered from stoppages; I have had many thirty days' leave and never lost a penny; but I confess I am ignorant of the interpretation of "unemployed pay." Under this despatch, if it said on sick leave (and we cannot be otherwise unemployed) in India, then I could understand it, and say it was a boon; nor is the effective pay so very superior: as surgeon of a cavalry regiment, I drew 850 rupees, now it is 890 rupees; as assistant in charge 664 rupees, now 660 rupees; as assistant-surgeon of a native infantry regiment, I drew 421 rupees, now 450 rupees; no great difference when I recollect that as an assistant, I have drawn as much as 720 rupees a month, having extra charges, but these days are gone; now there are no extras; the present pay is fixed for all work that a medical officer may be required to perform; nor does it appear that two months leave in every twelve will now be allowed to count for service, for paragraph 38 specially states that *six months* sick leave will be allowed to count towards actual service in the grades of inspector and deputy-inspector-generals, a mighty boon indeed—*six months* leave in *twenty-seven* years; not a word about other grades.

"D. I. G." takes me to task for not stating "that military funds in India are abolished also;" I did not refer to military funds, for the very simple reason that they had no bearing on the case, inasmuch as *military funds gave no annuities as medical funds did*, so that I do not see the force of your correspondent's argument, and must admit my ignorance.

Now, sir, as my sole object in writing was to give my junior brethren the benefit of my experience, without any desire for appearing in print, I must decline any further controversy on this subject; but should anyone desire information for information sake only, you may give my address to those you know, and I shall be happy to explain anything I have written.

I am, etc.,

A RETIRED SURGEON MAJOR.

December, 1864.

P.S. The statement in the *Spectator*, that £300 a year is granted by the Medical Retiring Fund, in addition to pension, is incorrect, and at variance with paragraph 45 of the despatch. The comparison between the pensions of the medical and civil service is simply absurd; the highest in the former is £550, against £1000 in the latter.

**HEREFORD INFIRMARY.** Mr. Lingen has resigned the honorary appointment of surgeon to this institution. Mr. Lingen was appointed on December 6th, 1838, on the death of the late Mr. Cam; and became senior surgeon in the following May, on the retirement of Mr. John Griffiths. His services have thus been given to the institution for almost twenty-six years; and he has been induced to resign only because the increase in his private practice leaves too little time at his disposal for the discharge, satisfactorily to himself, of the duties of this appointment. At a special meeting of the governors of the Infirmary, held on Thursday, Dec. 22nd, Mr. Thomas Turner was unanimously elected surgeon in the place of Mr. Lingen. At the same time, Mr. Lingen was unanimously elected surgeon extraordinary to the Infirmary and a life governor, as a testimony of the very valuable services rendered by him as surgeon to that Institution.

## Medical News.

**ROYAL COLLEGE OF PHYSICIANS OF LONDON.** At a general meeting of the Fellows, held on Thursday, December 22nd, 1864, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College:—

Church, William Selby, M.B. Oxon., Christ Church, Oxford  
Saunders, George James Symes, M.B. Lond., Devon County Lunatic Asylum, Exminster

The following gentleman, previously an extra-Licentiate of the College, was also admitted a member:—  
Pineoffs, Peter, M.D. Leyden, Naples

At the same meeting, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine, surgery, and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Bottle, Alexander, M.D. Edin., Dover  
Collyer, James, Oak House, Eritfield  
Fagge, Frederick Thomas, Hythe, Kent  
Frost, Walter, Brentford  
Gowland, John Edward, M.D. Colombia, Mount Pleasant, Gray's Inn Road  
Hayes, Hawkesley Roche, Basingstoke  
Magor, Thomas, Grantham  
Moore, Milner Montgomery, St. Mary's Hospital  
Miller, Charles James, Eden Bridge, Kent  
Pattison, Joseph Tarn, Wharf Rise, Kingland Road  
Spooner, William, Eling, Southampton  
Stone, Robert Sidney, Bath  
Woodman, Samuel, Ramsgate

The following gentlemen were reported by the examiners to have passed the Primary Professional Examination:—

Dowse, Thomas S., Charing Cross Hospital  
Goadall, Joseph, St. Bartholomew's Hospital  
Haydon, Nathaniel T. J., St. Mary's Hospital  
Jones, James, King's College  
Major, Napoleon B., St. Mary's Hospital  
Marsh, William Joseph, Guy's Hospital  
Raby, John, St. Thomas's Hospital  
Simpson, John Henry, St. Bartholomew's Hospital  
Stevens, George J. B., Guy's Hospital  
Taylor, Henry S., Guy's Hospital  
Thompson, Joseph, University College Hospital

**APOTHECARIES' HALL.** On December 22nd, the following Licentiates were admitted:—

Antomni, Charles, King's College Hospital  
Ensor, Alfred, King's College Hospital  
Holman, Herman Roerhove, London Hospital  
Shackleton, James, Manchester

At the same Court, the following passed the final examination:—

Braye, Hardwick Hubert, Guy's Hospital  
Raine, George Ralph, Guy's Hospital  
Rowlands, James David, Guy's Hospital

### APPOINTMENTS.

\*LINGEN, Charles, Esq., elected Surgeon-Extraordinary to the Hereford Infirmary.  
TURNER, Thomas, Esq., elected Surgeon to the Hereford Infirmary, in the room of \*C. Lingen, Esq., resigned.

### DEATHS.

IRVINE, James Pearson, L.R.C.P. Edin., at Galgate, Lancashire, on December 12.  
\*MACMUNN, John, M.D., in Dublin, lately.  
RANKING, In Guernsey, on December 15th, Louisa Letitia, wife of W. H. Ranking, M.D., late of Norwich.

**DONATIONS.** Mr. Crawshaw, of Caversham, Reading, has sent a donation of £105, 13s. 6d. to the Free Hospital, The Marquis of Wessex, Dr. Gussent £1000 to the Hospital for Incurables, and the Hospital for Diseases of the Throat.

**ST. BARTHOLOMEW'S HOSPITAL.** The election of a physician to St. Bartholomew's Hospital is fixed for January 10th, 1865.

**TESTIMONIAL TO DR. ODLING.** On November 30th, the students of Guy's Hospital showed their kind feelings to Dr. Odling by presenting him with a handsome claret jug and fish knife and fork.

**THE SPREAD OF FEVER IN IRELAND.** The Irish Poor-law Commissioners draw the attention of boards of guardians to the fact that at the present time, and for several weeks past, cases of fever, of a very dangerous type in some localities, have been more frequent in the country than at any time during a long series of years past.

**MEMORIAL OF DR. KIRKES.** At a meeting at St. Bartholomew's Hospital, it has been resolved that a subscription should be raised by the friends and pupils of the late Dr. Kirkes, to establish a memorial of him. It was also resolved that the memorial should be represented in a gold medal, to be given every year to the student found most efficient in diagnosis and treatment of medical diseases.

**THE STUDENTS AT EDINBURGH UNIVERSITY.** A circular has been issued by the Senatus Academicus of the University in regard to the disgraceful uproar which took place on the occasion of the delivery of the venerable Principal's inaugural address to the students. The Senatus threaten in future to inflict severe punishment on any student who may be found guilty of such shameful breach of decency and discipline.

**PRESENTATION TO MR. F. BUCKLAND.** The Council of the Royal College of Surgeons has just presented to Mr. Frank Buckland a complete set (in thirteen volumes quarto) of the *Illustrated Catalogue of the Museum*, elegantly bound, with an inscription signed by Mr. Hodgson, the President, signifying that the presentation is in acknowledgment of the efficient services rendered by Mr. Buckland in searching for and identifying, in the vaults of the church of St. Martin-in-the-Fields, the coffin containing the remains of John Hunter.

## OPERATION DAYS AT THE HOSPITALS.

**MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's for Fistula and other Diseases of the Rectum, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
**TUESDAY....** Guy's, 1 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
**WEDNESDAY...** St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.  
**THURSDAY.....** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.—Royal Orthopedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.  
**FRIDAY.....** Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.  
**SATURDAY.....** St. Thomas's, 1 P.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock, Clinical Demonstration and Operations 1 P.M.—Royal Free, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

**Monday.** Geological Society of London, 8 P.M. General Meeting of Officers.  
**Tuesday.** Obstetrical Society of London, 8 P.M. Annual Meeting of the Society. Election of Officers. Dr. Playfair, in the Chair. On the Cause of Premature Fecundation; and other papers.  
**Wednesday.** Anatomical Society of London, 8 P.M. Anniversary. Address and Election of Officers.  
**Thursday.** Royal Society of Medicine, 8 P.M. Anniversary. Address and Election of Officers.

## TO CORRESPONDENTS.

\* \* All letters and communications for the JOURNAL to be addressed to the EDITOR, 37, Great Queen St., Lincoln's Inn Fields, W.C.

**COMMUNICATIONS.**—To prevent a not uncommon misconception, we beg to inform our correspondents that, as a rule, all communications which are not returned to their authors, are retained for publication.

**CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

**T. M.**—The use and mode of administration of podophyllum will be found in all the new works on materia medica.

**THE NEW BRANCH.**—A correspondent writes:—"I rejoice to find my old friends in Newcastle are bucking on their armour to join the ranks of the Association. They are good men and true"

**F. T.**—The County Court Judge at Leicester, who said "A physician can claim nothing in a Court of Law", and the lawyer who assent-d thereto, are both in error. Some, and the very great majority of physicians in the country, can make legal claim. The Medical Act gave the Colleges the power (if they chose to avail themselves of it within a given time) of excluding themselves from the benefits of being able to enforce their claims for fees in a Court of Law. The London College did avail itself of this privilege on behalf of its Fellows; but we believe no other of the Colleges has availed itself of the dispensing clause. Consequently, most of the physicians in the country can avail themselves of the full benefits of the Medical Act.

**THE FRENCH MEDICAL PROVIDENT ASSOCIATION.**—The statement made in the periodical, referred to by our correspondent, to the effect that the French Medical Association has expended a handsome sum towards erecting a statue to one of the masters of our art, is—like many other statements made in that quarter—not true. The French Association has not expended a farthing for the purpose indicated. What it did at its annual meeting was to appoint a Committee "to raise a subscription to perform a pious duty towards the immortal discoverer of auscultation." Since then, a decree of the Emperor, of the 27th November, has authorised the erection of a statue to Laennec. And the Committee, consisting of many of the leading men of France, has now opened a subscription list for the purpose; but not one farthing of its funds has been voted by the French Medical Association, or rather Provident Fund; and doubtless could not be voted by it for such a purpose. The statement, again, that the French Association prosecutes quacks, is equally untrue. It has never done so. These erroneous statements, as we have already said, can only be the productions either of malevolence or of ignorance.

**MR. HARTSHORNE AND MR. THURSFIELD.**—SIR: In Mr. Thursfield's letter in the JOURNAL of the 17th instant, he states:—"I gave no evidence whatever as to the treatment of the child by Mr. Hartshorne, or the fee he ought to charge for his services. I purposely abstained from stating my opinion on these points." If neither the fee nor the treatment were in question, upon what points did he give evidence? Mr. Thursfield does not deny that he was a witness for the defence, and admits that "the case" was "for the recovery of his bill"; and says, "I answered most of the questions put to me." What, then, did the questions he was asked refer to?

I solemnly declare that I sent you a truthful report of Mr. Thursfield's evidence; and, for the most part, in the identical words used by himself. I am, etc., FREDERICK H. HARTSHORNE.

Broseley, December 22nd, 1864.

[Mr. Hartshorne wishes the insertion of the above note in justification of the statements previously made by him. EDITOR.]

**COMMUNICATIONS** have been received from:—Dr. ALEXANDER FLEMING; Mr. W. DATE; THE HONORARY SECRETARIES OF THE OBSTETRICAL SOCIETY OF LONDON; Mr. STONE; Mr. WILLIAM CORNEY; Mr. C. GAINES; Dr. J. A. McMUNN; Mr. REGINALD HARRISON; Mr. J. W. IRVINE; Mr. HAYNES WALTON; Mr. J. YOSE SOLOMON; Dr. RANKING; Dr. HEATON; and Dr. C. J. PAYNE.

## BOOKS RECEIVED.

1. Functional Diseases of the Stomach. By John Chapman, M.D. Part I. London: 1864.
2. Varicose Veins; their Nature, Consequences, and Treatment, Palliative and Curative. By H. T. Chapman. Second Edition. London: 1864.



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